```
=> d his

     (FILE 'HOME' ENTERED AT 17:29:55 ON 08 JAN 2001)

     FILE 'HCAPLUS' ENTERED AT 17:29:59 ON 08 JAN 2001
L1           215 S GOSSELIN G?/AU
L2           519 S IMBACH J?/AU
L3           322 S BRYANT M?/AU
L4             1 S L1 AND L2 AND L3
L5           869 S L1-3
L6            30 S L5 AND HEPATITIS(W)B
L7          3306 S ?DEOXYNUCLEOSID?
L8             8 S L7 AND L6
L9             6 S L8 AND .BETA.
L10            6 S L9 OR L4
                 SELECT RN L10 1-6

     FILE 'REGISTRY' ENTERED AT 17:32:23 ON 08 JAN 2001
L11          105 S E1-105

     FILE 'HCAPLUS' ENTERED AT 17:32:40 ON 08 JAN 2001
L12            5 S L10 AND L11
L13            1 S L10 NOT L12

     FILE 'REGISTRY' ENTERED AT 17:36:02 ON 08 JAN 2001
L14        85391 S OC4/ES(P)(NCNC2-NCNC3/ES)
L15        60264 S L14 AND NRS<10
                 E RIBAVARIN/CN
L16            9 S E4-15
L17            1 S 3TC/CN
                 E 3TC/CN
                 E FTC/CN
L18            4 S E3-6
                 E L-FMAU/CN
L19            1 S E3
                 E DAPD/CN
L20            1 S E3
                 E FAMCICLOVIR/CN
L21            1 S E3
                 E PENCICLOVIR/CN
L22            5 S E3-7
                 E BMS-200475/CN
                 E BIS POM PMEA/CN
                 E BIS PMEA/CN
                 E PMEA/CN
L23            2 S E3-4
                 E DIPIVOXIL/CN
                 E LOBUCAVIR/CN
L24            1 S E3
                 E GANCICLOVIR/CN
L25            4 S E3-7

     FILE 'HCAPLUS' ENTERED AT 17:47:12 ON 08 JAN 2001
L26       177665 S L15
L27        10681 S HEPATITIS(W)B
L28          107 S L26(L)L27
L29           24 S L28 AND .BETA.
L30           22 S L29 NOT L10
L31            3 S L30 AND PY>1998
L32           19 S L30 NOT L31
L33         3979 S L16-25
L34            2 S L32 AND L33

     FILE 'REGISTRY' ENTERED AT 17:55:21 ON 08 JAN 2001
L35              STR
L36           50 S L35 SSS SAM SUB=L15
L37         7658 S L35 SSS FUL SUB=L15
                 SAVE L37 CRA747P/A
L38          981 S L37 AND .BETA.
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Inventor's work

5 cites w/ 105 cpds shown
1 cite no cpds displayed

claim 9 drugs

2 cites

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     FILE 'HCAPLUS' ENTERED AT 18:06:35 ON 08 JAN 2001
L39        5080 S L38
L40           4 S L39(L)L27
L41          12 S L39 AND L27
L42          54 S L39 AND L16-25
L43           4 S L39(L)HEPATITIS
L44          13 S L39 AND HEPATITIS?
L45           4 S L43 OR L40
L46           1 S L45 AND L42
L47           1 S L46 NOT (L10 OR L34)
L48           2 S L45 NOT (L10 OR L34 OR L47)
L49          13 S L41 OR L44
L50           9 S L49 NOT (L45 OR L10 OR L34)
L51           1 S L50 AND L42
L52           8 S L50 NOT L51

     FILE 'REGISTRY' ENTERED AT 18:22:19 ON 08 JAN 2001
L53             STR L35
L54          50 S L53 SSS SAM SUB=L37
L55        6334 S L53 SSS FUL SUB=L37
               SAVE L55 CRA747S2/A
L56         727 S L55 AND .BETA.

     FILE 'HCAPLUS' ENTERED AT 18:34:54 ON 08 JAN 2001
L57       15736 S L55
L58          12 S L27(L)L57
L59          34 S L27 AND L57
L60          92 S L16-25 AND L57
L61           5 S L60 AND L59
L62           5 S L61 NOT L10
L63           3 S L62 NOT (L45 OR L10 OR L34 OR 50)
L64          21 S L59 NOT (L45 OR L10 OR L34 OR L50 OR L61)

     FILE 'REGISTRY' ENTERED AT 18:46:53 ON 08 JAN 2001
L65           4 S L55 AND L11
               SAVE L11 CRA747I/A
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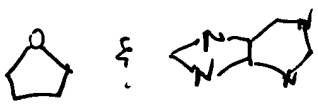
1 cite

2 cites

1 cite

5 cites

3 cites

cpd must have  (left out purines!)

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=> d que l38

L14        85391 SEA FILE=REGISTRY ABB=ON  PLU=ON  OC4/ES(P)(NCNC2-NCNC3/ES)
L15        60264 SEA FILE=REGISTRY ABB=ON  PLU=ON  L14 AND NRS<10
L35              STR
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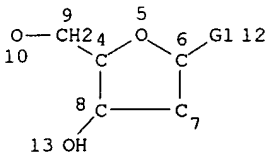


Hy@1 Hy@3

```
VAR G1=1/3
NODE ATTRIBUTES:
CONNECT IS E3  RC AT   4
CONNECT IS E3  RC AT   6
CONNECT IS E2  RC AT   7
CONNECT IS E3  RC AT   8
DEFAULT MLEVEL IS ATOM
GGCAT   IS MCY  UNS  AT   1
GGCAT   IS PCY  UNS  AT   3
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E4 C  E2 N  AT   1
ECOUNT  IS E5 C  E4 N  AT   3

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  11

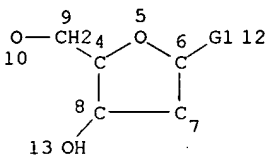
STEREO ATTRIBUTES: NONE
L37         7658 SEA FILE=REGISTRY SUB=L15 SSS FUL L35
L38          981 SEA FILE=REGISTRY ABB=ON  PLU=ON  L37 AND .BETA.
```

```
=> d que 155

L14        85391 SEA FILE=REGISTRY ABB=ON  PLU=ON  OC4/ES(P)(NCNC2-NCNC3/ES)
L15        60264 SEA FILE=REGISTRY ABB=ON  PLU=ON  L14 AND NRS<10
L35              STR
```

parent set

Subset #1



Hy @1 Hy @3

```
VAR G1=1/3
NODE ATTRIBUTES:
CONNECT IS E3  RC AT   4
CONNECT IS E3  RC AT   6
CONNECT IS E2  RC AT   7
CONNECT IS E3  RC AT   8
DEFAULT MLEVEL IS ATOM
GGCAT   IS MCY  UNS  AT   1
GGCAT   IS PCY  UNS  AT   3
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E4 C  E2 N  AT   1
ECOUNT  IS E5 C  E4 N  AT   3

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L37        7658 SEA FILE=REGISTRY SUB=L15 SSS FUL L35
L53             STR
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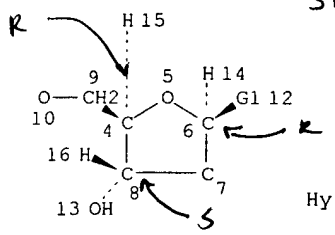
Subset set #2; absolute sc is incorrect all nodes showed he reversed (the enantiomer)



Hy @1 Hy @3

```
VAR G1=1/3
NODE ATTRIBUTES:
CONNECT IS E3  RC AT   4
CONNECT IS E3  RC AT   6
CONNECT IS E2  RC AT   7
CONNECT IS E3  RC AT   8
DEFAULT MLEVEL IS ATOM
GGCAT   IS MCY  UNS  AT   1
GGCAT   IS PCY  UNS  AT   3
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E4 C  E2 N  AT   1
ECOUNT  IS E5 C  E4 N  AT   3

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  14

STEREO ATTRIBUTES:
STEREO DEFAULT RELATIVE
NUMBER OF CHIRAL CENTERS IS 3
L55        6334 SEA FILE=REGISTRY SUB=L37 SSS FUL L53
```

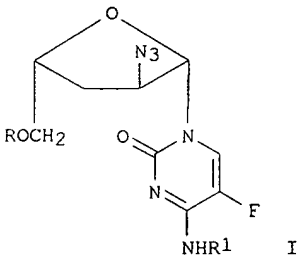
=> d bib abs hitstr l12 1

L12 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:314706 HCAPLUS
DN 132:308603
TI Preparation of nucleosides with anti-**hepatitis B** virus activity
IN **Gosselin, Gilles; Imbach, Jean-Louis**; Sommadossi, Jean-Pierre; Schinazi, Raymond F.
PA Centre National de la Recherche Scientifique, Fr.; The UAB Research Foundation; Emory University
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000026225	A2	20000511	WO 1999-US26157	19991105
WO 2000026225	A3	20001005		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-107116 19981105
US 1999-115653 19990113
OS MARPAT 132:308603
GI

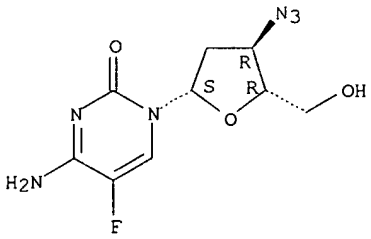


I

AB This invention is directed towards the prepn. of .**beta**.-L-(2' or 3'- azido)-2',3'-dideoxy-5-fluorocytosines I (R = H, acyl, monophosphate, diphosphate, triphosphate, or a stabilized phosphate deriv. (to form a stabilized nucleotide prodrug); R1 = H, acyl, or alkyl) active against **hepatitis B** virus and a method for the treatment of **hepatitis B** virus infection in humans and other host animals. Thus, .**beta**.-L-(2'-azido)-2',3'-dideoxy-5-fluorocytidine was prepd. and tested for its anti-**hepatitis B** activity in transfected Hep G-2(2.2.15) cells (EC50 = 0.1 .mu.M) and cytotoxicity (CC50 > 200 .mu.M).

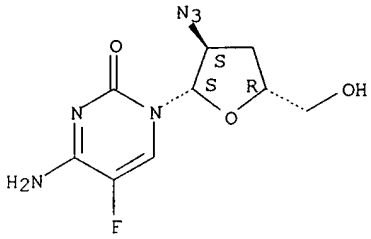
IT **265988-73-6P 265988-81-6P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of nucleosides with anti-**hepatitis B** virus activity)
RN 265988-73-6 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(3-azido-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

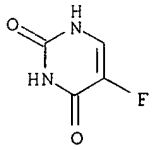


RN 265988-81-6 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-azido-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

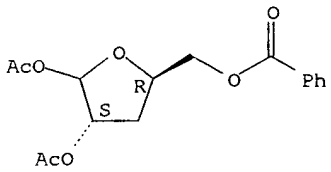


IT **51-21-8**, 5-Fluorouracil **170079-20-6 201287-82-3**
RL: RCT (Reactant)
(prepn. of nucleosides with anti-**hepatitis B** virus activity)
RN 51-21-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (9CI) (CA INDEX NAME)



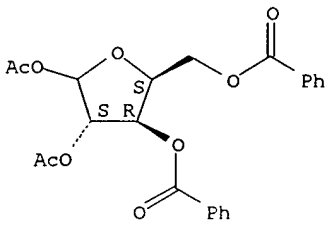
RN 170079-20-6 HCAPLUS
CN L-erythro-Pentofuranose, 3-deoxy-, 1,2-diacetate 5-benzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 201287-82-3 HCAPLUS
CN L-Xylofuranose, 1,2-diacetate 3,5-dibenzoate (9CI) (CA INDEX NAME)

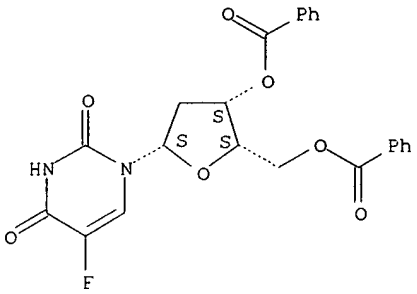
Absolute stereochemistry.



IT **77180-89-3P 169823-51-2P 169823-53-4P**
265988-66-7P 265988-67-8P 265988-68-9P
265988-69-0P 265988-70-3P 265988-71-4P
265988-72-5P 265988-74-7P 265988-75-8P
265988-76-9P 265988-77-0P 265988-78-1P
265988-79-2P 265988-80-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of nucleosides with anti-**hepatitis B** virus activity)

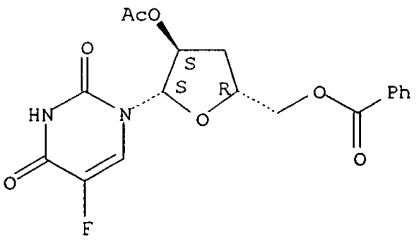
RN 77180-89-3 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



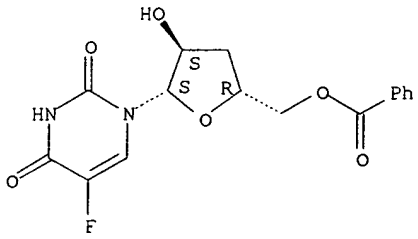
RN 169823-51-2 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-O-acetyl-5-O-benzoyl-3-deoxy-.beta.-L-erythro-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



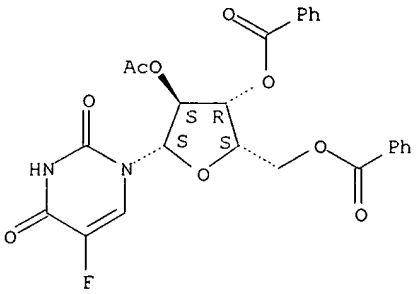
RN 169823-53-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(5-O-benzoyl-3-deoxy-.beta.-L-erythro-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



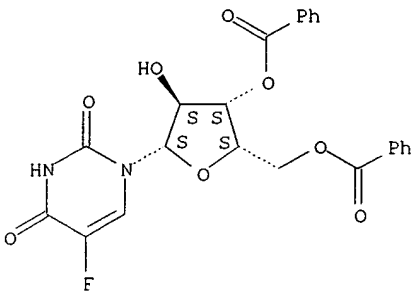
RN 265988-66-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-O-acetyl-3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



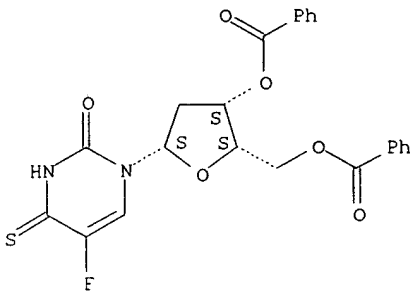
RN 265988-67-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



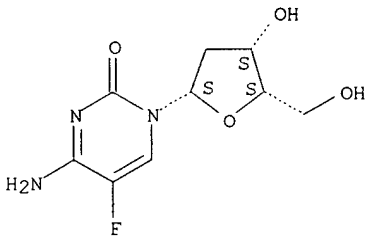
RN 265988-68-9 HCAPLUS
CN 2(1H)-Pyrimidinone, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro-3,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



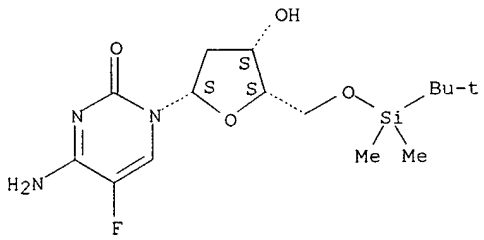
RN 265988-69-0 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



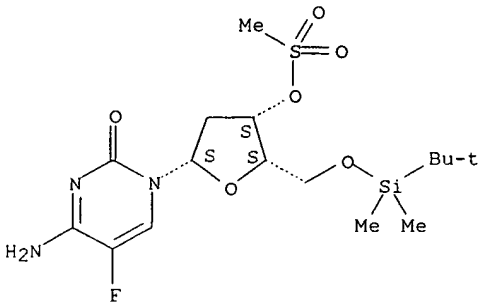
RN 265988-70-3 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[2-deoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-L-threo-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



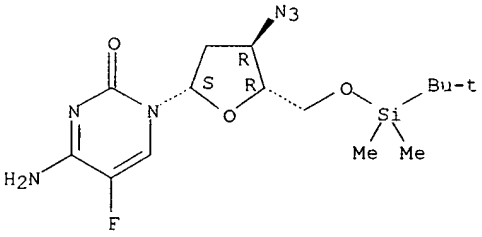
RN 265988-71-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[2-deoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-3-O-(methylsulfonyl)-.beta.-L-threo-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



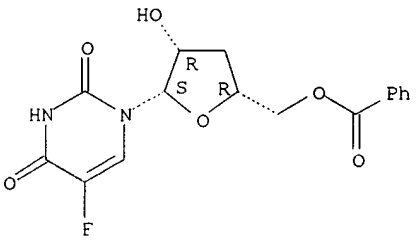
RN 265988-72-5 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[3-azido-2,3-dideoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-L-erythro-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



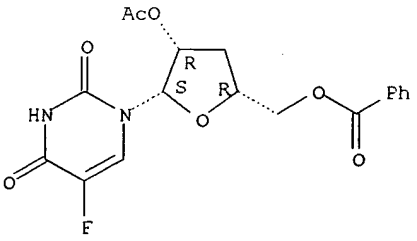
RN 265988-74-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(5-O-benzoyl-3-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



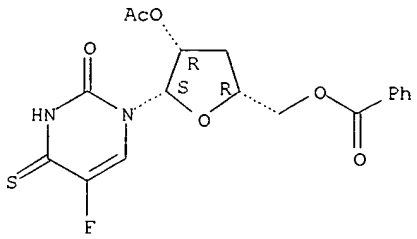
RN 265988-75-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-O-acetyl-5-O-benzoyl-3-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



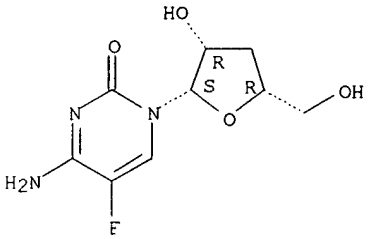
RN 265988-76-9 HCAPLUS
CN 2(1H)-Pyrimidinone, 1-[2-O-acetyl-5-O-benzoyl-3-deoxy-.beta.-L-threo-pentofuranosyl]-5-fluoro-3,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



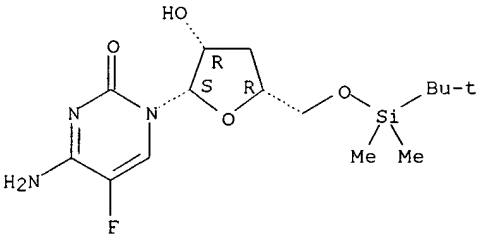
RN 265988-77-0 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(3-deoxy-.beta.-L-threo-pentofuranosyl)-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



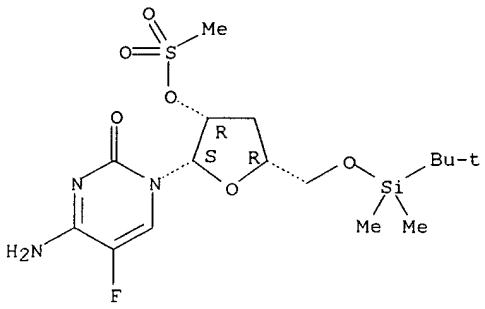
RN 265988-78-1 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[3-deoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-L-threo-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



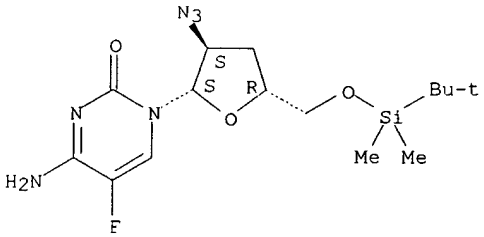
RN 265988-79-2 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[3-deoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(methylsulfonyl)-.beta.-L-threo-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 265988-80-5 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[2-azido-2,3-dideoxy-5-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-L-erythro-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



=> d bib abs hitstr l12 2

L12 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:133703 HCAPLUS
DN 132:166457
TI Preparation of .**beta**.-L-2'-**deoxynucleosides** for the treatment of **hepatitis B**
IN **Gosselin, Gilles; Imbach, Jean-louis; Bryant, Martin L.**
PA Novirio Pharmaceuticals Ltd., Cayman I.; Centre National de la Recherche Scientifique
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000009531	A2	20000224	WO 1999-US18149	19990810
	WO 2000009531	A3	20000615		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9954757	A1	20000306	AU 1999-54757	19990810
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	US 1999-131352		19990428		
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OS MARPAT 132:166457
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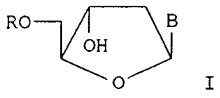


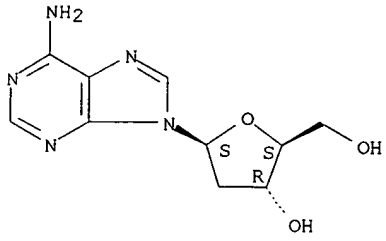
I

AB This invention is directed to a method for treating a host infected with **hepatitis B** comprising administering an effective amt. of an anti-HBV biol. active 2'-deoxy-.**beta**.-L-erythro-pentofuranonucleoside or a pharmaceutically acceptable salt or prodrug thereof, wherein the 2'-deoxy-.**beta**.-L-erythro-pentofuranonucleoside I wherein R is selected from the group consisting of H, straight chained, branched or cyclic alkyl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate deriv.; and B is a purine or pyrimidine base which may be optionally substituted. The 2'-deoxy-.**beta**.-L-erythro-pentofuranonucleoside or a pharmaceutically acceptable salt or prodrug thereof may be administered either alone or in combination with another 2'-deoxy-.**beta**.-L-erythro-pentofuranonucleoside or in combination with another anti-**hepatitis B** agent. Thus, .**beta**.-L-deoxycytidine was prepd. and tested for its anti-**hepatitis B** activity in transfected Hep G-2(2.2.15) cells (EC50 = 0.05 .mu.M) and cytotoxicity (IC50 > 200 .mu.M).

IT **14365-45-8P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of .**beta**.-L-2'-**deoxynucleosides** for the treatment of **hepatitis B**)

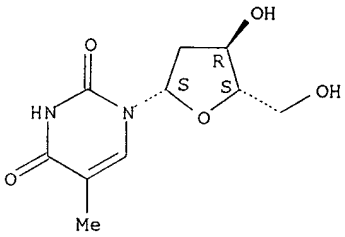
RN 14365-45-8 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



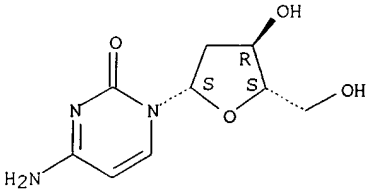
IT **3424-98-4P 40093-94-5P 179112-93-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of .**beta**.-L-2'-**deoxynucleosides** for the treatment of **hepatitis B**)
RN 3424-98-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-deoxy-.beta.-L-erythro-pentofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



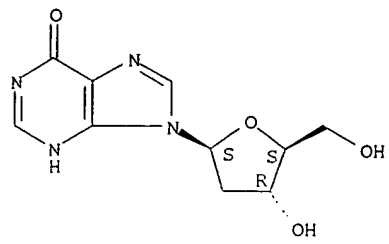
RN 40093-94-5 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 179112-93-7 HCAPLUS
CN 6H-Purin-6-one, 9-(2-deoxy-.beta.-L-erythro-pentofuranosyl)-1,9-dihydro- (9CI) (CA INDEX NAME)

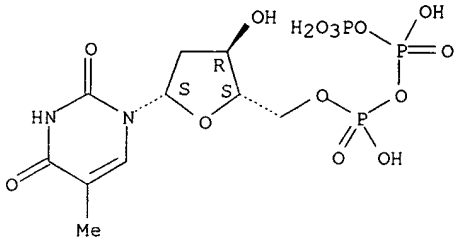
Absolute stereochemistry. Rotation (+).



IT **152502-95-9 189639-16-5 198632-86-9 258854-64-7**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of **.beta.-L-2'-deoxynucleosides** for the treatment of **hepatitis B**)

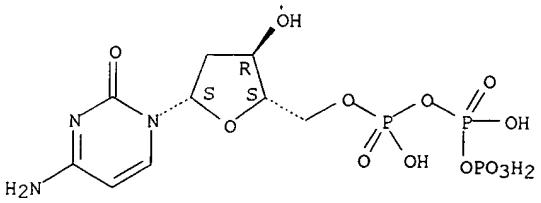
RN 152502-95-9 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-L-erythro-pentofuranosyl]-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



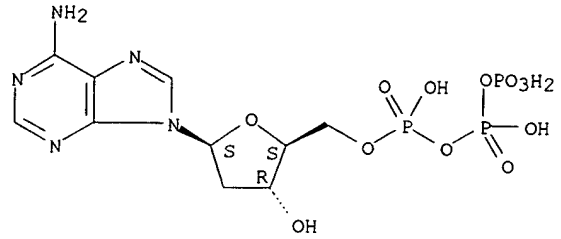
RN 189639-16-5 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-L-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



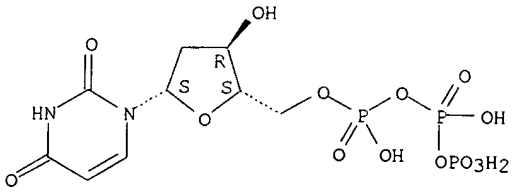
RN 198632-86-9 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-L-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

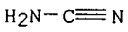


RN 258854-64-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy) phosphinyl]oxy]phosphinyl]-.beta.-L-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

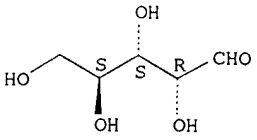


IT **420-04-2**, Cyanamide **5328-37-0**, L-Arabinose **24259-59-4**, L-Ribose **154463-66-8** **154463-68-0** **258529-69-0**
RL: RCT (Reactant)
(prepn. of .**beta**.-L-2'-**deoxynucleosides** for the treatment of **hepatitis B**)
RN 420-04-2 HCAPLUS
CN Cyanamide (8CI, 9CI) (CA INDEX NAME)



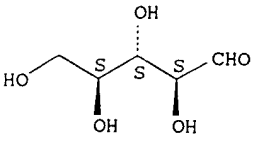
RN 5328-37-0 HCAPLUS
CN L-Arabinose (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 24259-59-4 HCAPLUS
CN L-Ribose (9CI) (CA INDEX NAME)

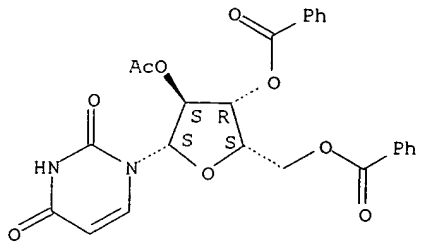
Absolute stereochemistry.



RN 154463-66-8 HCAPLUS

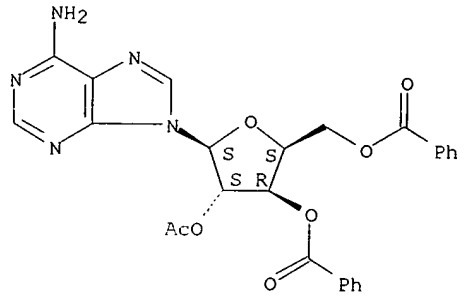
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-O-acetyl-3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



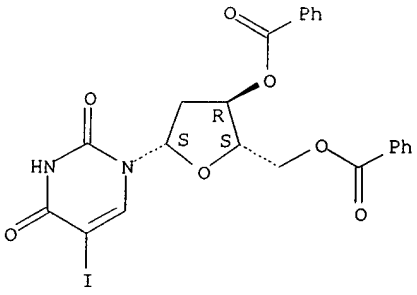
RN 154463-68-0 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-O-acetyl-3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 258529-69-0 HCAPLUS
CN 2,4(1H,3H)-Pyrimmidinedione, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-erythro-pentofuranosyl)-5-iodo- (9CI) (CA INDEX NAME)

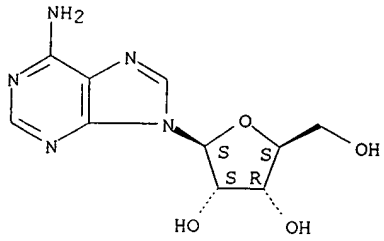
Absolute stereochemistry.



IT **3080-29-3P**, L-Adenosine **3080-30-6P 31501-46-9P**
31615-96-0P 31615-98-2P 31615-99-3P
35939-60-7P 40093-85-4P 40093-93-4P
216571-43-6P 216571-44-7P 233681-07-7P
233681-08-8P 233681-09-9P 258529-64-5P
258529-65-6P 258529-66-7P 258529-67-8P
258529-68-9P 258529-70-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of .**beta**.-L-2'-**deoxynucleosides** for the treatment of **hepatitis B**)

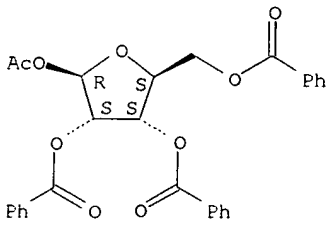
RN 3080-29-3 HCAPLUS
CN 9H-Purin-6-amine, 9-.beta.-L-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



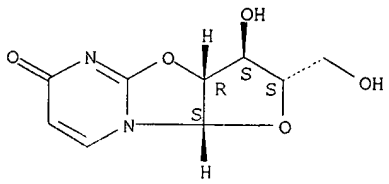
RN 3080-30-6 HCAPLUS
CN .beta.-L-Ribofuranose, 1-acetate 2,3,5-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



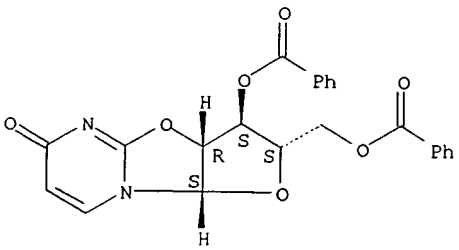
RN 31501-46-9 HCAPLUS
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)-, (2S,3S,3aR,9aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



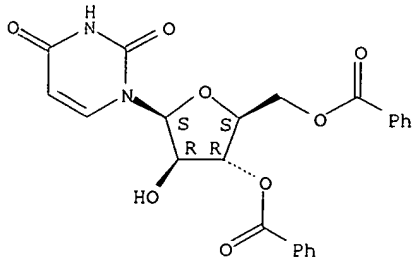
RN 31615-96-0 HCAPLUS
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 3-(benzoyloxy)-2-[(benzoyloxy)methyl]-2,3,3a,9a-tetrahydro-, (2S,3S,3aR,9aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



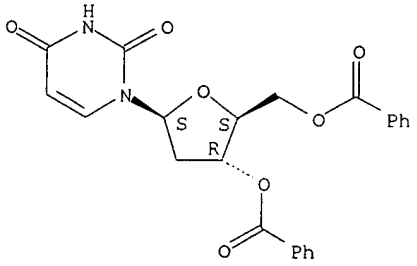
RN 31615-98-2 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-.beta.-L-arabinofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



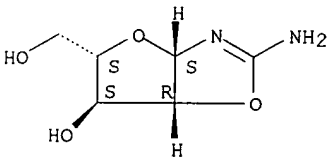
RN 31615-99-3 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



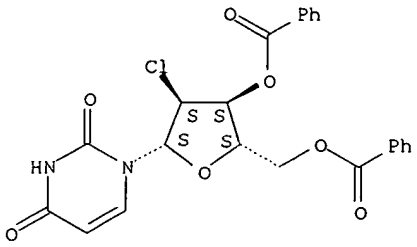
RN 35939-60-7 HCAPLUS
CN Furo[2,3-d]oxazole-5-methanol, 2-amino-3a,5,6,6a-tetrahydro-6-hydroxy-, (3aS,5S,6S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



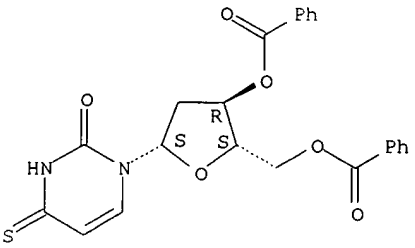
RN 40093-85-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-2-chloro-2-deoxy-.beta.-L-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



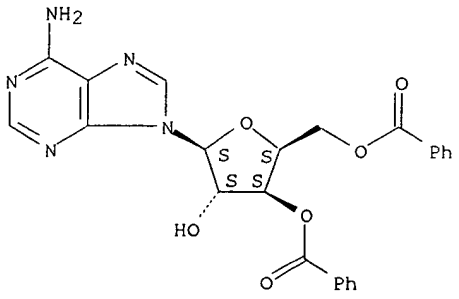
RN 40093-93-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-erythro-pentofuranosyl)-3,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



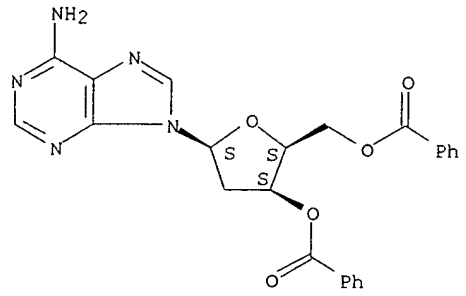
RN 216571-43-6 HCAPLUS
CN 9H-Purin-6-amine, 9-(3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



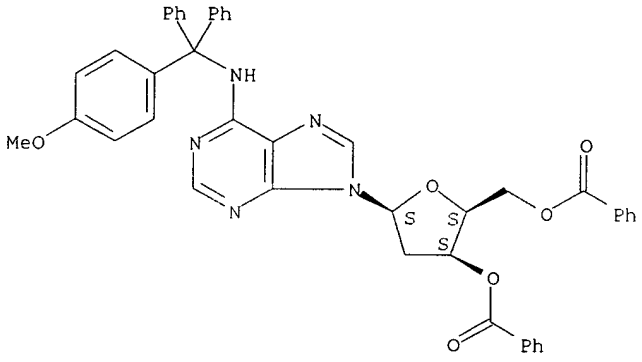
RN 216571-44-7 HCAPLUS
CN 9H-Purin-6-amine, 9-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-threo-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



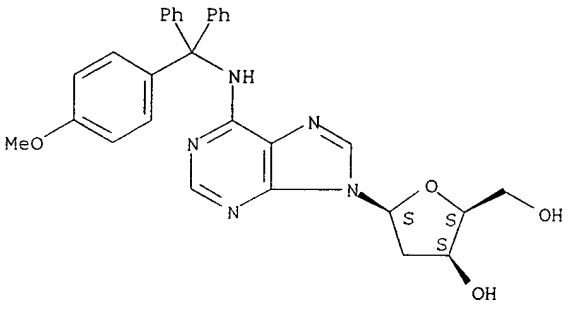
RN 233681-07-7 HCAPLUS
CN 9H-Purin-6-amine, 9-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-threo-pentofuranosyl)-N-[(4-methoxyphenyl)diphenylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



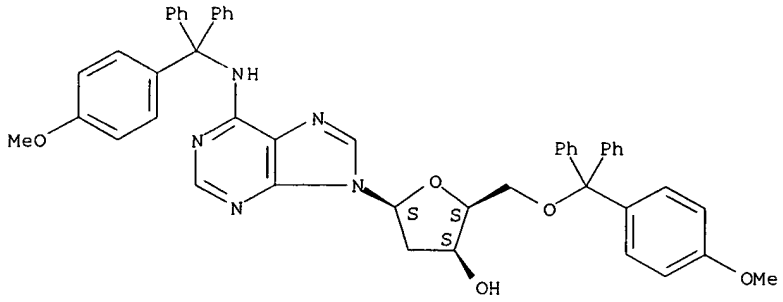
RN 233681-08-8 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-deoxy-.beta.-L-threo-pentofuranosyl)-N-[(4-methoxyphenyl)diphenylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



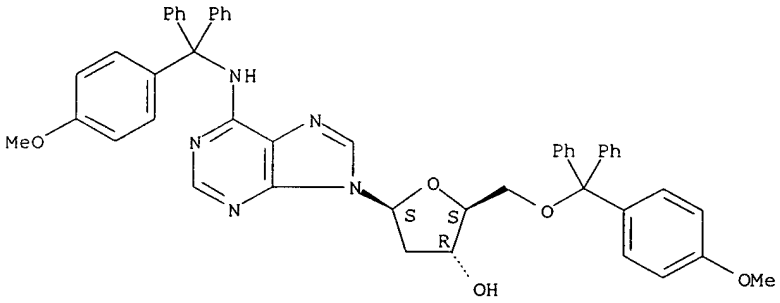
RN 233681-09-9 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-deoxy-5-O-[(4-methoxyphenyl)diphenylmethyl]-.beta.-L-threo-pentofuranosyl]-N-[(4-methoxyphenyl)diphenylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



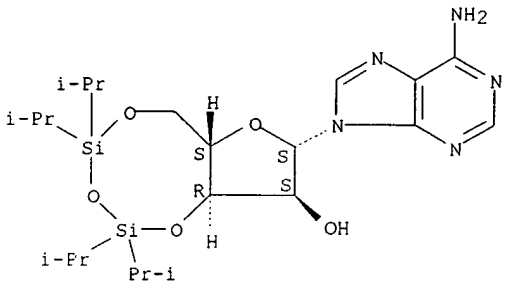
RN 258529-64-5 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-deoxy-5-O-[(4-methoxyphenyl)diphenylmethyl]-.beta.-L-erythro-pentofuranosyl]-N-[(4-methoxyphenyl)diphenylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



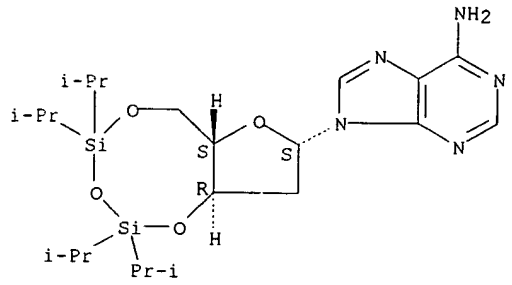
RN 258529-65-6 HCAPLUS
CN 9H-Purin-6-amine, 9-[3,5-O-[1,1,3,3-tetrakis(1-methylethyl)-1,3-disiloxanediyl]-.beta.-L-ribofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



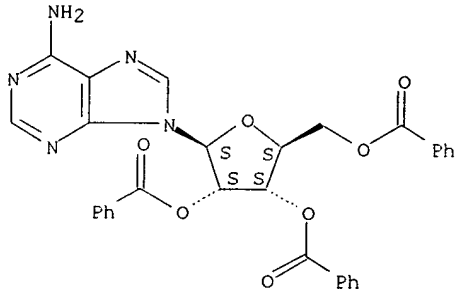
RN 258529-66-7 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-deoxy-3,5-O-[1,1,3,3-tetrakis(1-methylethyl)-1,3-disiloxanediyl]-.beta.-L-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



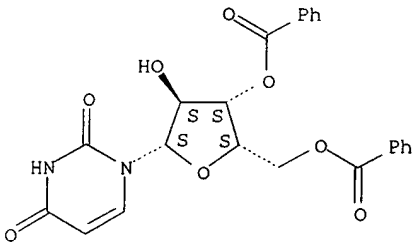
RN 258529-67-8 HCAPLUS
CN 9H-Purin-6-amine, 9-(2,3,5-tri-O-benzoyl-.beta.-L-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



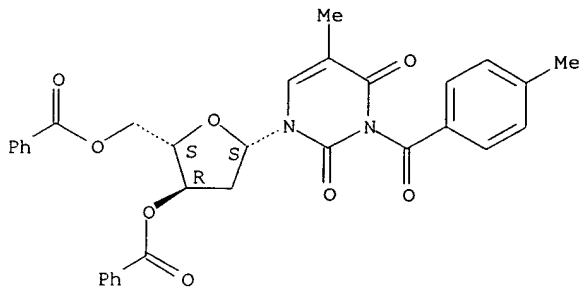
RN 258529-68-9 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 258529-70-3 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-erythro-pentofuranosyl)-5-methyl-3-(4-methylbenzoyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.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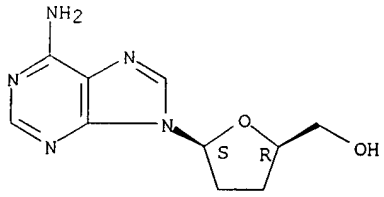
=> d bib abs hitstr l12 3

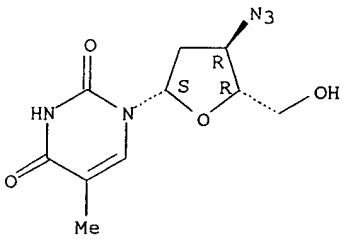
L12 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:757941 HCAPLUS
DN 128:97335
TI New unnatural L-nucleoside enantiomers: from their stereospecific synthesis to their biological activities
AU **Gosselin, G.**; Boudou, V.; Griffon, J.-F.; Pavia, G.; Pierra, C.; **Imbach, J.-L.**; Aubertin, A.-M.; Schinazi, R. F.; Faraj, A.; Sommadossi, J.-P.
CS Laboratoire Chimie Bioorganique, UMR CNRS 5625, Universite Montpellier II, Montpellier, 34095, Fr.
SO Nucleosides Nucleotides (1997), 16(7-9), 1389-1398
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
AB Several purine and pyrimidine .**beta**.-L-**dideoxynucleosides** were stereospecifically synthesized and their antiviral properties examd. Two of them, namely .**beta**.-L-2',3'-dideoxyadenosine (.**beta**.-L-ddA) and its 2',3'-didehydro deriv. (.**beta**.-L-d4A) were found to have significant anti-human immunodeficiency virus (HIV) and anti-**hepatitis B** virus (HBV) activities in cell culture.
IT **61246-68-2P 132979-39-6P 135212-56-5P 160963-01-9P 201287-78-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antiviral activity of several purine and pyrimidine .**beta**.-L-**dideoxynucleosides**)
RN 61246-68-2 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)tetrahydro-, (2R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



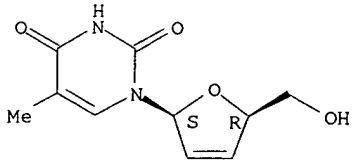
RN 132979-39-6 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3-azido-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



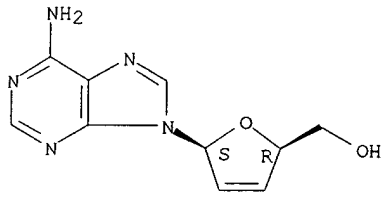
RN 135212-56-5 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-2,5-dihydro-5-(hydroxymethyl)-2-furanyl]-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



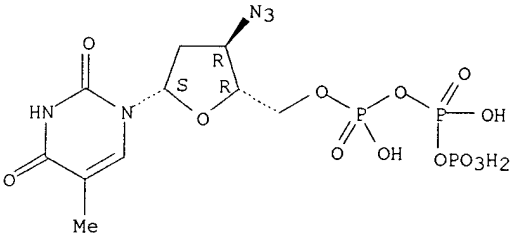
RN 160963-01-9 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)-2,5-dihydro-, (2R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

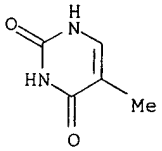


RN 201287-78-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-azido-2,3-dideoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-L-erythro-pentofuranosyl]-5-methyl- (9CI) (CA INDEX NAME)

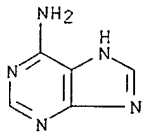
Absolute stereochemistry.



IT **65-71-4**, Thymine **73-24-5**, Adenine, reactions
170079-20-6 201287-82-3
RL: RCT (Reactant)
(prepn. and antiviral activity of several purine and pyrimidine **.beta.-L-dideoxynucleosides**)
RN 65-71-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl- (9CI) (CA INDEX NAME)

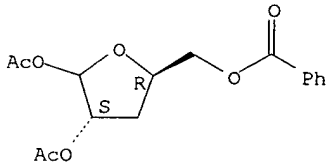


RN 73-24-5 HCAPLUS
CN 1H-Purin-6-amine (9CI) (CA INDEX NAME)



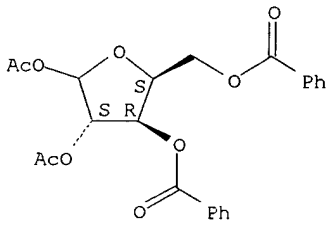
RN 170079-20-6 HCAPLUS
CN L-erythro-Pentofuranose, 3-deoxy-, 1,2-diacetate 5-benzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



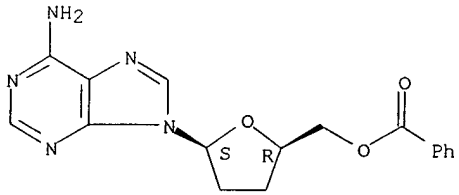
RN 201287-82-3 HCAPLUS
CN L-Xylofuranose, 1,2-diacetate 3,5-dibenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



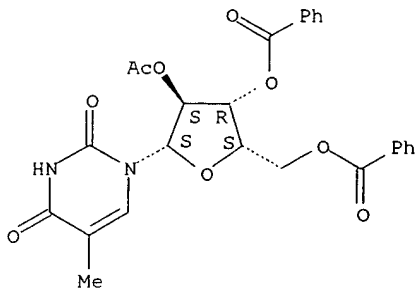
IT **121154-61-8P 154463-67-9P 201287-83-4P**
201287-84-5P 201287-85-6P 201287-86-7P
201287-87-8P 201287-88-9P 201287-89-0P
201295-39-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antiviral activity of several purine and pyrimidine **.beta.-L-dideoxynucleosides**)
RN 121154-61-8 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)tetrahydro-, benzoate (ester), (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



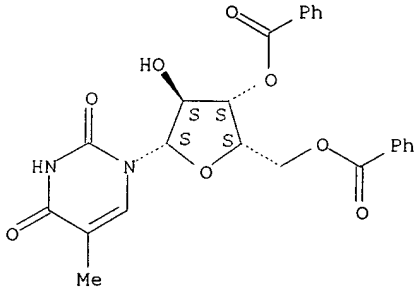
RN 154463-67-9 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-O-acetyl-3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



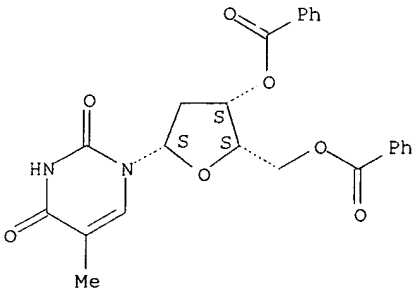
RN 201287-83-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-.beta.-L-xylofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



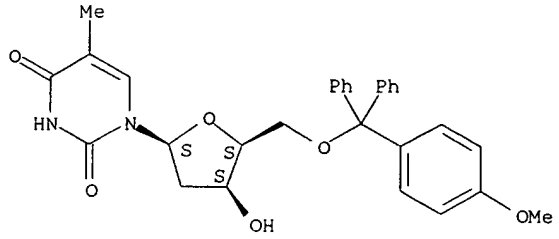
RN 201287-84-5 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3,5-di-O-benzoyl-2-deoxy-.beta.-L-threo-pentofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



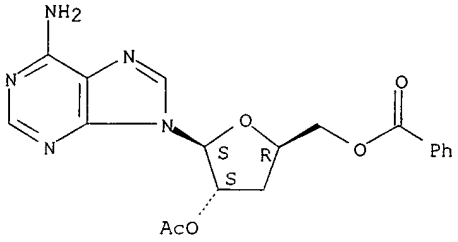
RN 201287-85-6 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-deoxy-5-O-[(4-methoxyphenyl)diphenylmethyl]-.beta.-L-threo-pentofuranosyl]-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



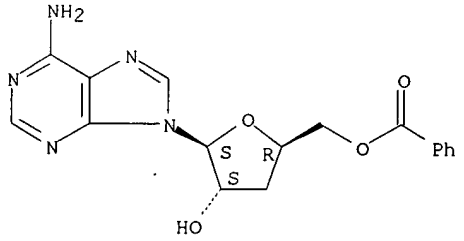
RN 201287-86-7 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-O-acetyl-5-O-benzoyl-3-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



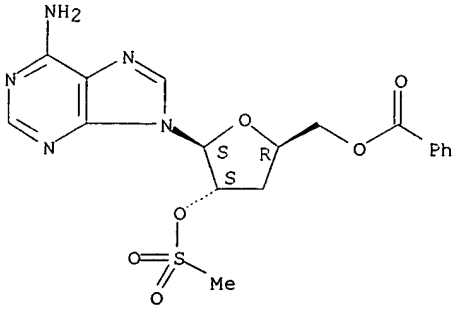
RN 201287-87-8 HCAPLUS
CN 9H-Purin-6-amine, 9-(5-O-benzoyl-3-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



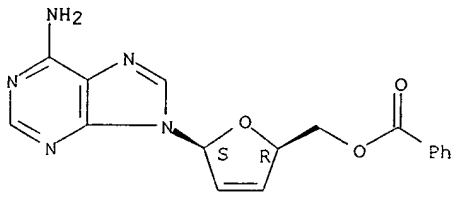
RN 201287-88-9 HCAPLUS
CN 9H-Purin-6-amine, 9-[5-O-benzoyl-3-deoxy-2-O-(methylsulfonyl)-.beta.-L-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



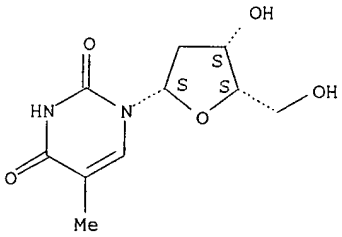
RN 201287-89-0 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)-2,5-dihydro-, benzoate (ester), (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



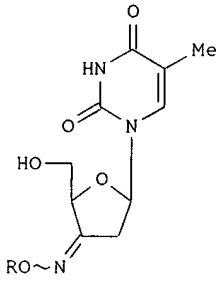
RN 201295-39-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-deoxy-.beta.-L-threo-pentofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs hitstr l12 4

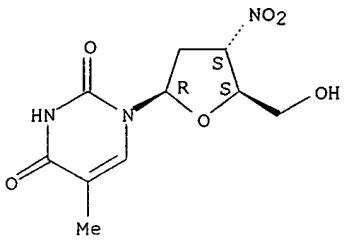
L12 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:129872 HCAPLUS
DN 126:144494
TI Novel 3'-C/N-Substituted 2',3'-.**beta**.-D-**Dideoxynucleosides** as Potential Chemotherapeutic Agents. 1. Thymidine Derivatives: Synthesis, Structure, and Broad Spectrum Antiviral Properties
AU Fedorov, Ivan I.; Kazmina, Ema M.; Gurskaya, Galina V.; Jasko, Maxim V.; Zavodnic, Valery E.; Balzarini, Jan; De Clercq, Erik; Faraj, Abdesslem; Sommadossi, Jean-Pierre; **Imbach, Jean-Louis; Gosselin, Gilles**
CS Moscow Medical Sechenov Academy, Moscow, 119881, Russia
SO J. Med. Chem. (1997), 40(4), 486-494
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
GI



I

AB 3'-Oxime nucleosides, e.g. (E)-I (R = H) (II), (Z)-I (R = Me) (III), and 1-(2,3-dideoxy-3-nitro-.**beta**.-D-erythro-pentofuranosyl)thymine (IV) were prepd. starting from appropriately 5'-protected 3'-ketothymidine. X-ray anal. showed that 3'-N-hydroxyimino II and 3'-N-methoxyimino III derivs. have close mol. conformations: anti about the N1-C1' bond, and gauche+ about the C4'-C5' exocyclic bond. Their sugar conformations are C1'-exo-O4'-endo and C1'-exo-C2'-endo, resp. The antiviral assays in cell cultures demonstrated that 3'-N-hydroxyimino II and 3'-N-acetoxyimino derivs. are endowed with significant activity against human immunodeficiency virus (HIV) with EC50 values ranging between 0.02 and 0.40 .mu.g/mL for both HIV-1 and HIV-2. The other compds. III and IV were at least 2 orders of magnitude less active. The 3'-N-hydroxyimino deriv. II also shows promising activity against **hepatitis B** virus (HBV) (EC50 = 0.25 .mu.g/mL) and against herpes simplex virus type 1 (HSV-1) and HSV-2.
IT **151753-97-8P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and conformation of 3'-oxime-substituted **dideoxynucleosides** as antivirals)
RN 151753-97-8 HCAPLUS
CN Thymidine, 3'-deoxy-3'-nitro- (9CI) (CA INDEX NAME)

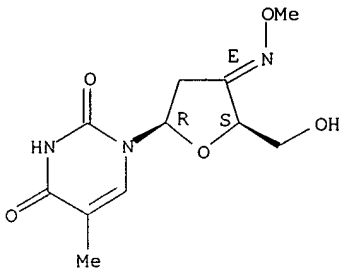
Absolute stereochemistry.



IT **169821-84-5P 170079-10-4P 186667-41-4P**
186667-44-7P 186667-47-0P 186667-49-2P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and conformation of 3'-oxime-substituted **dideoxynucleosides** as antivirals)

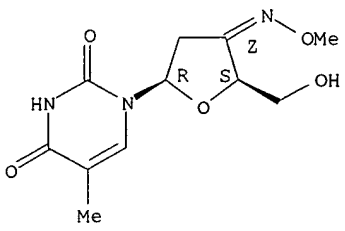
RN 169821-84-5 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-5-(hydroxymethyl)-4-(methoxyimino)-2-furanyl]-, [2R-(2.alpha.,4E,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



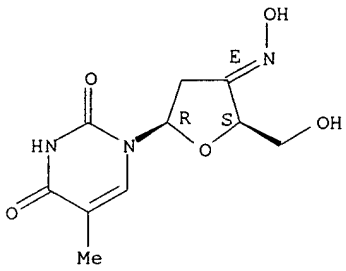
RN 170079-10-4 HCAPLUS
CN Thymidine, 3'-deoxy-3'-(methoxyimino)-, (3'Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



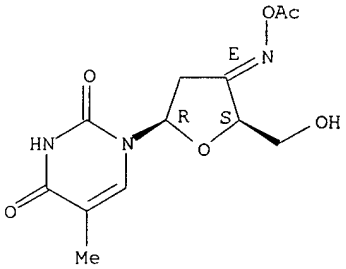
RN 186667-41-4 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-4-(hydroxyimino)-5-(hydroxymethyl)-2-furanyl]-, [2R-(2.alpha.,4E,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



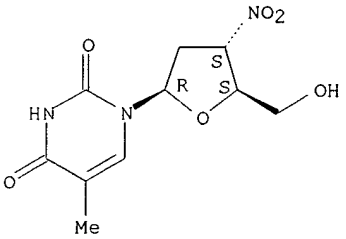
RN 186667-44-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(acetyloxy)imino]tetrahydro-5-(hydroxymethyl)-2-furanyl]-5-methyl-, [2R-(2.alpha.,4E,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 186667-47-0 HCAPLUS
CN Thymidine, 3'-deoxy-3'-nitro-, monosodium salt (9CI) (CA INDEX NAME)

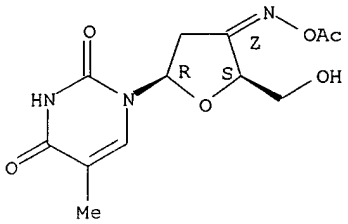
Absolute stereochemistry.



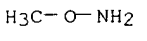
● Na

RN 186667-49-2 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(acetyloxy)imino]tetrahydro-5-(hydroxymethyl)-2-furanyl]-5-methyl-, [2R-(2.alpha.,4Z,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



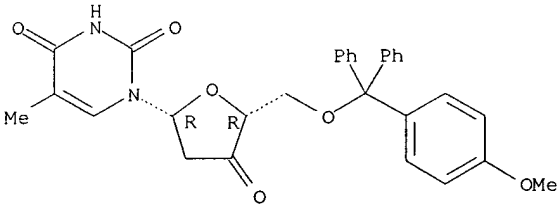
IT **593-56-6**, O-Methylhydroxylamine hydrochloride **121417-05-8**
RL: RCT (Reactant)
(prepn. and conformation of 3'-oxime-substituted **dideoxynucleosides** as antivirals)
RN 593-56-6 HCAPLUS
CN Hydroxylamine, O-methyl-, hydrochloride (8CI, 9CI) (CA INDEX NAME)



● HCl

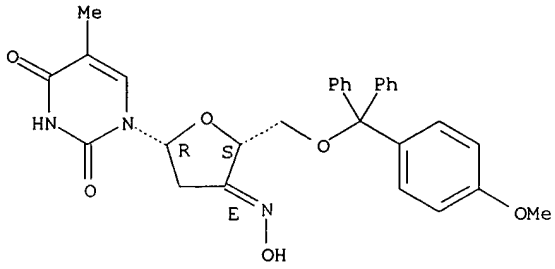
RN 121417-05-8 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-5-[[(4-methoxyphenyl)diphenylmethoxy]methyl]-4-oxo-2-furanyl]-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



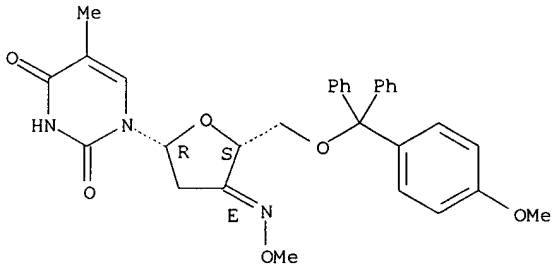
IT **186667-40-3P 186667-42-5P 186667-43-6P**
186667-45-8P 186667-46-9P 186667-48-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conformation of 3'-oxime-substituted **dideoxynucleosides** as antivirals)
RN 186667-40-3 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-4-(hydroxyimino)-5-[[(4-methoxyphenyl)diphenylmethoxy]methyl]-2-furanyl]-, [2R-(2.alpha.,4E,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



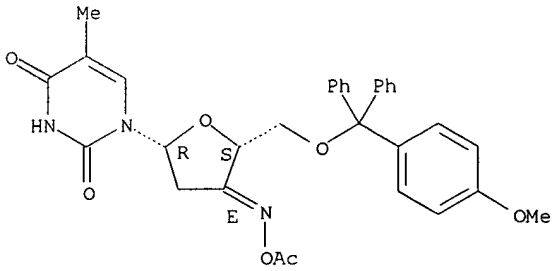
RN 186667-42-5 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-4-(methoxyimino)-5-[[(4-methoxyphenyl)diphenylmethoxy]methyl]-2-furanyl]-, [2R-(2.alpha.,4E,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



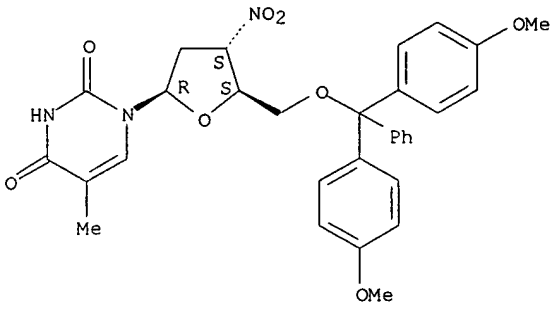
RN 186667-43-6 HCAPLUS
CN Thymidine, 3'-[(acetyloxy)imino]-3'-deoxy-5'-O-[(4-methoxyphenyl)diphenylmethyl]-, (3'E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



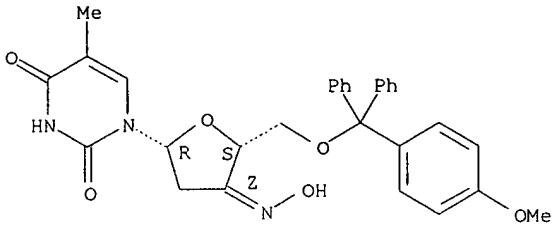
RN 186667-45-8 HCAPLUS
CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-3'-deoxy-3'-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



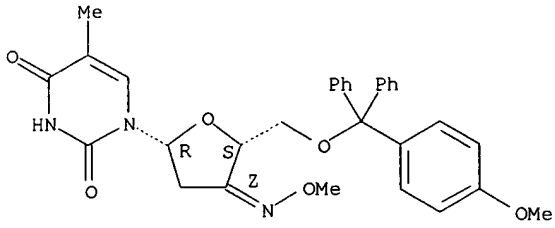
RN 186667-46-9 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-4-(hydroxyimino)-5-[[(4-methoxyphenyl)diphenylmethoxy]methyl]-2-furanyl]-, [2R-(2.alpha.,4Z,5.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 186667-48-1 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[tetrahydro-4-(methoxyimino)-5-[[(4-methoxyphenyl)diphenylmethoxy]methyl]-2-furanyl]-, [2R-(2.alpha.,4Z,5.alpha.)]- (9CI) (CA INDEX NAME)

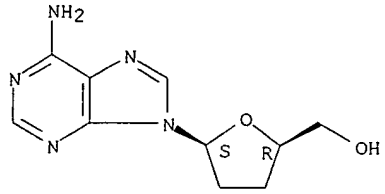
Absolute stereochemistry.
Double bond geometry as shown.



=> d bib abs hitstr l12 5

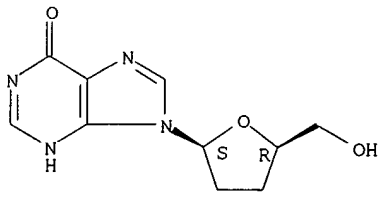
L12 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:594452 HCAPLUS
DN 125:292251
TI Inhibition of **hepatitis B** virus replication by nucleoside enantiomers of .**beta**.-2',3'-dideoxypurine analogs
AU El alaoui, A. M.; Faraj, A.; Pierra, C.; Boudou, V.; Johnson, R.; Mathe, C.; **Gosselin, G.**; Korba, B. E.; **Imbach, J.-L.**; et al.
CS Dep. Pharm., Toxicology, Liver Center, Div, Clinical Pharmacology, Univ. Alabama Birmingham, Birmingham, AL, 35294, USA
SO Antiviral Chem. Chemother. (1996), 7(5), 276-280
CODEN: ACCHEH; ISSN: 0956-3202
DT Journal
LA English
AB Various purine .**beta**.-L-2',3'-**dideoxynucleoside** analogs with both sugar and base modifications including .**beta**.-L-ddG, .**beta**.-L-ddI, .**beta**.-L-ddA, s'-azido-.**beta**.-L-araddA, 2'-amino-.**beta**.-L-araddA, 2',5'-anhydro-.**beta**.-L-araddA, 2'-azido-.**beta**.-L-ddA, 2'-amino-.**beta**.-L-ddA, 2'-fluoro-.**beta**.-L-ddA, 3'-azido-.**beta**.-L-ddA, 3'-amino-.**beta**.-L-ddA, 3'-fluoro-.**beta**.-L-ddA, 2,6-diamino-.**beta**.-L-2',3'-didecxyfuranosylpurine, 6-cyclopropylamino-.**beta**.-L-ddA, 2'-azido-6-Ntriphenylphosphine-.**beta**.-L-araddA, 2-amino-6-methylamino-.**beta**.-L-2',3'-dideoxyfuranosylpurine, 2-amino-6-cyclopropylamino-.**beta**.-L-2',3'-dideoxyfuranosylpurine, 2-amino-6-cyclopentylamino-.**beta**.-L-2',3'-dideoxyfuranosylpurine, 2',3'-didehydro-.**beta**.-L-ddA, and 2',3'-didehydro-6-N-triphenylphosphine-.**beta**.-L-ddA were synthesized and evaluated as potential inhibitors of **hepatitis B** virus (HBV) replication in HBV DNA-transfected human hepatoblastoma-derived Hep-G2 cells (2.2.15 cells). .**beta**.-L-DdA, 2'-azido-.**beta**.-L-ddA, 3'-azido-.**beta**.-L-ddA, 2',3'-didehydro- .**beta**.-L-ddA (.**beta**.-L-D4A) and a modified base of .**beta**.-L-D4A, inhibited HBV replication in vitro. .**beta**.-L-D4A was the more potent and selective anti-HBV agent with a 50% effective concn. values of 0.1 .mu.M and a selectivity index of 1800. On the basis of this finding, studies are in progress to synthesize new purine derivs. with the .**beta**.-L unnatural configuration which hopefully will lead to identifying addnl. potent and highly selective anti-HBV agents.
IT **61246-68-2P 160962-90-3P 160962-93-6P**
160962-97-0P 160963-01-9P 166411-50-3P
182922-59-4P 182922-62-9P 182922-64-1P
182922-66-3P 182922-68-5P 182922-70-9P
182922-71-0P 182922-72-1P 182929-00-6P
182929-01-7P 183073-68-9P 183073-69-0P
183073-70-3P
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(inhibition of **hepatitis B** virus replication by nucleoside enantiomers of .**beta**.-2',3'-dideoxypurine analogs)
RN 61246-68-2 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)tetrahydro-, (2R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



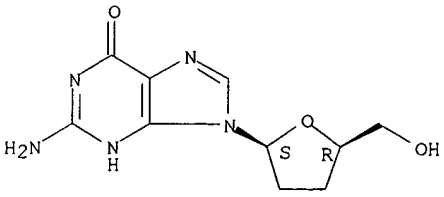
RN 160962-90-3 HCAPLUS
CN 6H-Purin-6-one, 1,9-dihydro-9-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



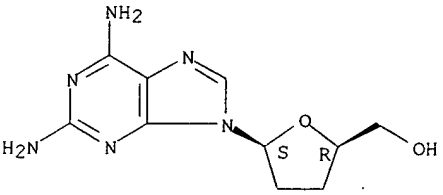
RN 160962-93-6 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



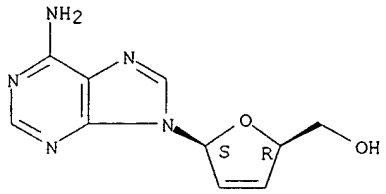
RN 160962-97-0 HCAPLUS
CN 2-Furanmethanol, 5-(2,6-diamino-9H-purin-9-yl)tetrahydro-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



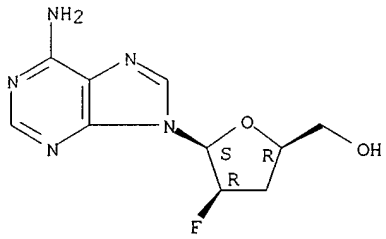
RN 160963-01-9 HCAPLUS
CN 2-Furanmethanol, 5-(6-amino-9H-purin-9-yl)-2,5-dihydro-, (2R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



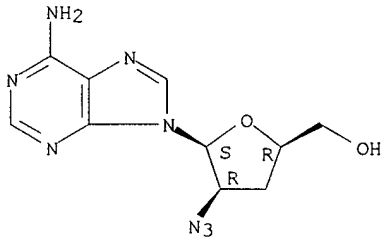
RN 166411-50-3 HCAPLUS
CN 9H-Purin-6-amine, 9-(2,3-dideoxy-2-fluoro-.beta.-L-threo-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



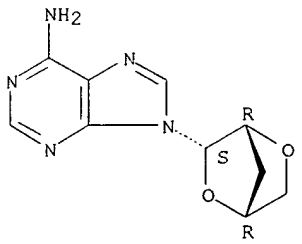
RN 182922-59-4 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-azido-2,3-dideoxy-.beta.-L-threo-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



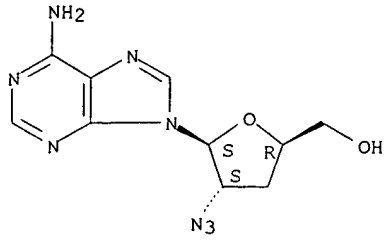
RN 182922-62-9 HCAPLUS
CN 9H-Purin-6-amine, 9-(2,5-anhydro-3-deoxy-.beta.-L-threo-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



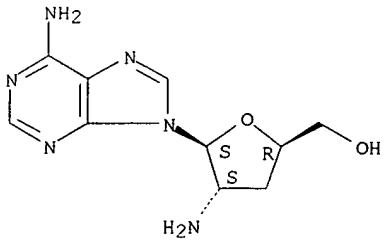
RN 182922-64-1 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-azido-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



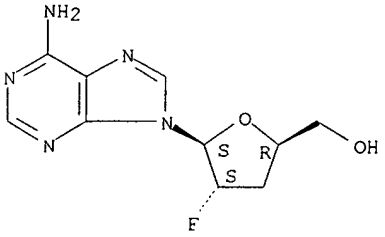
RN 182922-66-3 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-amino-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



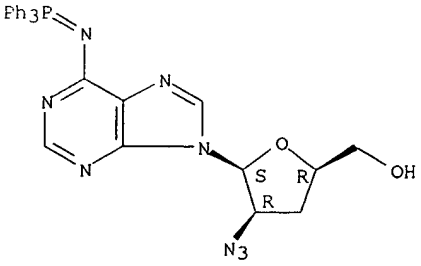
RN 182922-68-5 HCAPLUS
CN 9H-Purin-6-amine, 9-(2,3-dideoxy-2-fluoro-.beta.-L-erythro-pentofuranosyl)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 182922-70-9 HCAPLUS
CN 9H-Purin-6-amine, 9-(2-azido-2,3-dideoxy-.beta.-L-threo-pentofuranosyl)-N-
(triphenylphosphoranylidene)- (9CI) (CA INDEX NAME)

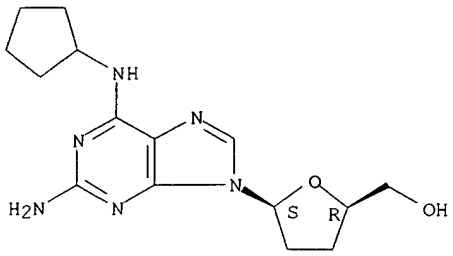
Absolute stereochemistry.



RN 182922-71-0 HCAPLUS
CN 2-Furanmethanol, 5-[2-amino-6-(cyclopentylamino)-9H-purin-9-yl]tetrahydro-

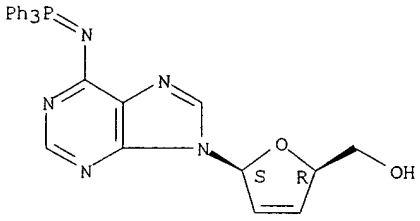
, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



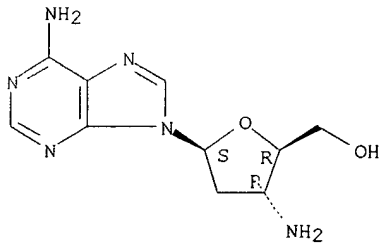
RN 182922-72-1 HCAPLUS
CN 2-Furanmethanol, 2,5-dihydro-5-[6-[(triphenylphosphoranylidene)amino]-9H-purin-9-yl]-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



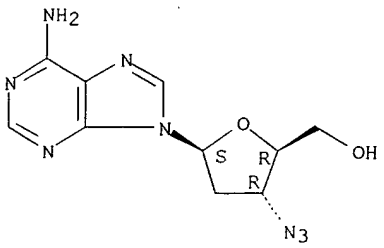
RN 182929-00-6 HCAPLUS
CN 9H-Purin-6-amine, 9-(3-amino-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



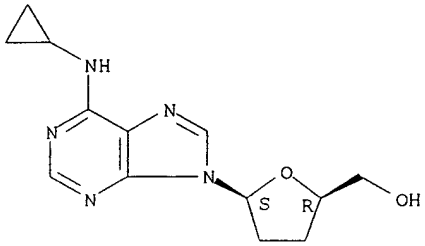
RN 182929-01-7 HCAPLUS
CN 9H-Purin-6-amine, 9-(3-azido-2,3-dideoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



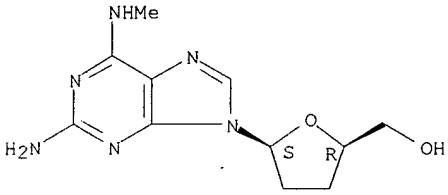
RN 183073-68-9 HCAPLUS
CN 2-Furanmethanol, 5-[6-(cyclopropylamino)-9H-purin-9-yl]tetrahydro-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



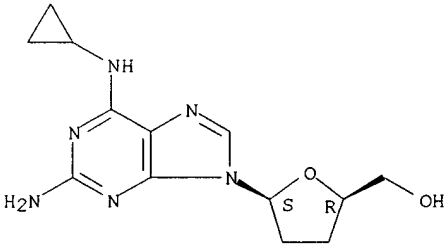
RN 183073-69-0 HCAPLUS
CN 2-Furanmethanol, 5-[2-amino-6-(methylamino)-9H-purin-9-yl]tetrahydro-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 183073-70-3 HCAPLUS
CN 2-Furanmethanol, 5-[2-amino-6-(cyclopropylamino)-9H-purin-9-yl]tetrahydro-, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



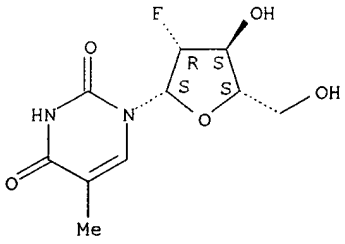
=> d bib abs l13 1

L13 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:448605 HCAPLUS
DN 131:130198
TI Stereospecific synthesis and antiviral activities of .**beta**.-L-2',3'-dideoxy-5-chloropyrimidine nucleoside derivatives
AU Pierra, C.; **Gosselin, G.**; Sommadossi, J.-P.; Faraj, A.; De Clercq, E.; Balzarini, J.; **Imbach, J.-L.**
CS Laboratoire de Chimie Bioorganique, UMR CNRS 5625, Universite de Montpellier II, Montpellier, Fr.
SO Nucleosides Nucleotides (1999), 18(4 & 5), 643-644
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
AB A symposium on the stereospecific synthesis and antiviral activities of .**beta**.-L-2',3'-dideoxy-5-chloropyrimidine nucleoside derivs. Several 5-chlorouracil and 5-chlorocytosine .**beta**.-L-**dideoxynucleosides** were stereospecifically synthesized and their activities against human immunodeficiency virus (HIV) and **hepatitis B** virus (HBV) were examined in cell culture.
RE.CNT 7
RE
(1) Balzarini, J; Mol Pharmacol 1989, V35, P571 HCAPLUS
(2) Daluge, S; Antimicrob Agents Chemother 1994, V38, P1590 HCAPLUS
(3) Gosselin, G; Antimicrob Agents Chemother 1994, V38, P1292 HCAPLUS
(4) Herdewijn, P; Med Chem Res 1991, V1, P9 HCAPLUS
(5) Lefebvre, I; J Med Chem 1995, V38, P3941 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l34 1

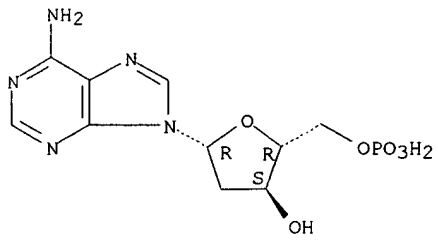
L34 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:75605 HCAPLUS
DN 128:212715
TI Inhibitory effect of 2'-fluoro-5-methyl-.**beta**.-L-arabinofuranosyl-uracil on duck hepatitis B virus replication
AU Aguesse-Germon, Stephanie; Liu, Shwu-Huey; Chevallier, Michele; Pichoud, Christian; Jamard, Catherine; Borel, Christelle; Chu, Chung K.; Trepo, Christian; Cheng, Yung-Chi; Zoulim, Fabien
CS INSERM U271, Lyon, 69003, Fr.
SO Antimicrob. Agents Chemother. (1998), 42(2), 369-376
CODEN: AMACCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB The antiviral activity of 2'-fluoro-5-methyl-.**beta**.-L-arabinofuranosyluracil (L-FMAU), a novel L-nucleoside analog of thymidine known to be an inhibitor of hepatitis B virus (HBV) replication in hepatoma cells (2.2.1.5 cell line), was evaluated in the duck HBV (DHBV) model. Short-term oral administration (5 days) of L-FMAU (40 mg/kg of body wt./day) to exptl. infected ducklings induced a significant decrease in the level of viremia. This antiviral effect was sustained in animals when therapy was prolonged for 8 days. The histol. study showed no evidence of liver toxicity in the L-FMAU-treated group. By contrast, microvesicular steatosis was found in the livers of dideoxycytidine-treated animals. L-FMAU administration in primary duck hepatocyte cultures infected with DHBV induced a dose-dependent inhibition of both virion release in culture supernatants and intracellular viral DNA synthesis, without clearance of viral covalently closed circular DNA. By using a cell-free system for the expression of an enzymically active DHBV reverse transcriptase, it was shown that L-FMAU triphosphate exhibits an inhibitory effect on the incorporation of dAMP in the viral DNA primer. Thus, our data demonstrate that L-FMAU inhibits DHBV replication in vitro and in vivo. Long-term administration of L-FMAU for the eradication of viral infection in animal models of HBV infection should be evaluated.
IT **163252-36-6**, L-FMAU
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(inhibitory effect of 2'-fluoro-5-methyl-.**beta**.-L-arabinofuranosyl-uracil on duck hepatitis B virus replication)
RN 163252-36-6 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-deoxy-2-fluoro-.beta.-L-arabinofuranosyl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT **653-63-4**, DAMP
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(inhibitory effect of 2'-fluoro-5-methyl-.**beta**.-L-arabinofuranosyl-uracil on duck **hepatitis B** virus replication in hepatocytes in relation to)
RN 653-63-4 HCAPLUS
CN 5'-Adenylic acid, 2'-deoxy- (9CI) (CA INDEX NAME)

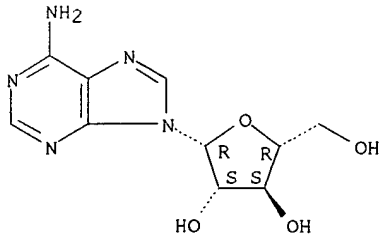
Absolute stereochemistry. Rotation (+).


NH2
N
N
N
N
O
R
R
S
OPO3H2
OH

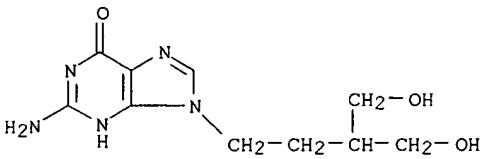
=> d bib abs hitstr l34 2

L34 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:330477 HCAPLUS
DN 125:75411
TI DNA polymerase activity of hepatitis B virus particles: differential inhibition by L-enantiomers of nucleotide analogs
AU Davis, Michelle G.; Wilson, Jeanne E.; VanDraanen, Nanine A.; Miller, Wayne H.; Freeman, George A.; Daluge, Susan M.; Boyd, Frank L.; Aulabaugh, Ann E.; Painter, George R.; et al.
CS Glaxo Wellcome Inc., Research Triangle Park, NC 27709, USA
SO Antiviral Res. (1996), 30(2,3), 133-145
CODEN: ARSRDR; ISSN: 0166-3542
DT Journal
LA English
AB DNA polymerase activity was assayed in hepatitis B virus (HBV) and core particles isolated from chronic producer lines. The particle-assocd. DNA polymerase activity, which was found to be limited to incorporation of only a few nucleotides, was inhibited by the 5'-triphosphates of nucleoside analogs. The 1-.**beta**.-L (1S,4R) and 1-.**beta**.-D (1R,4S) enantiomers of antiviral nucleoside analogs were compared for the ability to inhibit incorporation of natural nucleoside triphosphates into the viral DNA. Previously, both enantiomers of several analogs were found to be substrates for human immunodeficiency virus type 1 reverse transcriptase (HIV RT); the 1-.**beta**.-D enantiomers of some pairs were preferred as substrates. In contrast, the 1-.**beta**.-L enantiomers of all pairs tested were the more potent inhibitors of labeled substrate incorporation into hepatitis B virus DNA; the concn. required to inhibit the incorporation of the natural substrate by 50% was 6-fold to several hundred-fold lower than the concn. of the 1-.**beta**.-D enantiomer required for the same inhibitory effect. This preference for the 1-.**beta**.-L enantiomers was obsd. for both RNA-directed synthesis in core particles and DNA-directed synthesis in viral particles. The obsd. antiviral effect of the nucleoside analogs in cell culture seemed to be limited chiefly by their phosphorylation in cells.
IT **5536-17-4**, Vidarabine **39809-25-1**, Penciclovir
82410-32-0, Ganciclovir **134678-17-4**, 3TC
143491-57-0, (-)FTC
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(DNA polymerase activity of **hepatitis B** virus particles: differential inhibition by L-enantiomers of nucleotide analogs)
RN 5536-17-4 HCAPLUS
CN 9H-Purin-6-amine, 9-.beta.-D-arabinofuranosyl- (9CI) (CA INDEX NAME)

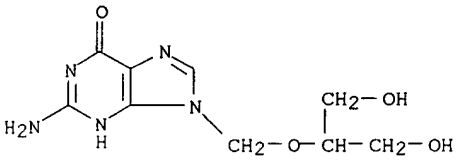
Absolute stereochemistry.



RN 39809-25-1 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[4-hydroxy-3-(hydroxymethyl)butyl]- (9CI) (CA INDEX NAME)

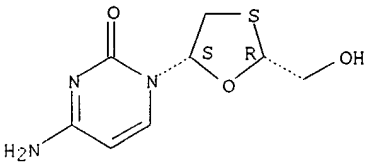


RN 82410-32-0 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-{[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl}- (9CI) (CA INDEX NAME)



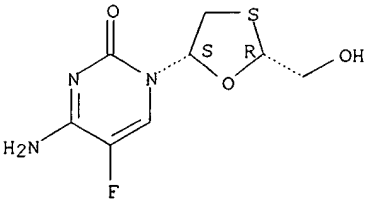
RN 134678-17-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



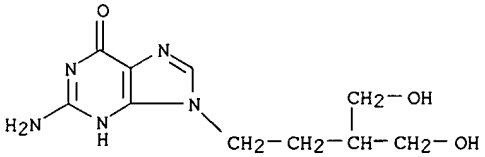
RN 143491-57-0 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

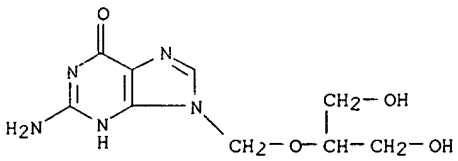


=> d bib abs hitstr l47

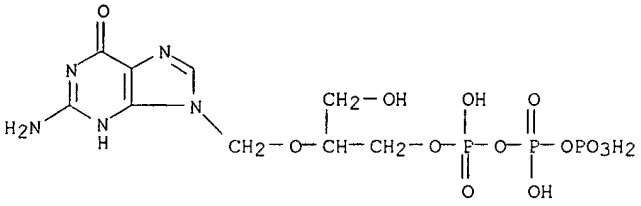
L47 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:92431 HCAPLUS
DN 126:126535
TI Inhibition of hepatitis B virus DNA polymerase by enantiomers of penciclovir triphosphate and metabolic basis for selective inhibition of HBV replication by penciclovir
AU Shaw, Tim; Mok, Su San; Locarnini, Stephen A.
CS Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital, Victoria, 3078, Australia
SO Hepatology (Philadelphia) (1996), 24(5), 996-1002
CODEN: HPTLD9; ISSN: 0270-9139
PB Saunders
DT Journal
LA English
AB The deoxyguanosine analog penciclovir (PCV; 9-[4-hydroxy-3-hydroxymethyl-but-1-yl]guanine), has shown potent antiviral activity against herpes viruses and hepadnaviruses. Efficacy against chronic hepatitis B virus (HBV) infection has been demonstrated in an animal model and in recent clin. trials of famciclovir, the oral form of PCV. The antiviral activity of PCV is believed to be dependent on the intracellular formation of PCV-triphosphate (PCV-TP) which is presumed to inhibit HBV replication by interfering with viral DNA polymerase activity. The (S)-enantiomer is preferentially formed in herpes virus-infected cells, and is the more active against the herpes simplex virus; however, little is known about the biochem. mechanisms of PCV phosphorylation or of interference with viral replication in HBV-infected cells. Here, we report that in contrast with herpes simplex virus, the (R)-enantiomer of PCV-TP is a more potent inhibitor of HBV DNA polymerase-reverse transcriptase (pol-RT) in vitro than the (S)-enantiomer. In assays for HBV DNA pol-RT activity, in which purified viral core particles were the enzyme source, the IC50s for (R- and S)-enantiomers of PCV-TP were 2.5 .mu.mol/L and 11 .mu.mol/L, resp. The estd. Kis for (R)- and (S)- PCV-TP were .apprxeq.0.03 .mu.mol/L and .apprxeq.0.04 .mu.mol/L, resp., about 3-fold lower than the Km for deoxy-guanosine triphosphate (dGTP) in the same system. In addn., we report that PCV metab. is similar in both control (HepG2) and in HBV-transfected (2.2.15) hepatoblastoma cells in vitro, indicating that cellular enzyme(s) catalyze PCV phosphorylation. Peak PCV-TP concns. of about .4 .mu.mol/L were reached in both cell types in less than 12 h, and intracellular PCV-TP was exceptionally stable with half-life of about 18 h. These observations provide a mechanistic basis for the potent activity of PCV against HBV.
IT **39809-25-1**, Penciclovir **82410-32-0**, Ganciclovir
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(inhibition of hepatitis B virus DNA polymerase by enantiomers of penciclovir triphosphate)
RN 39809-25-1 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[4-hydroxy-3-(hydroxymethyl)butyl]- (9CI) (CA INDEX NAME)



RN 82410-32-0 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)

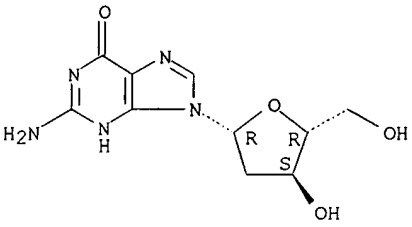


IT **86761-38-8**, Ganciclovir triphosphate
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); MFM (Metabolic formation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
(inhibition of hepatitis B virus DNA polymerase by enantiomers of penciclovir triphosphate)
RN 86761-38-8 HCAPLUS
CN Triphosphoric acid, P-[2-[(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)methoxy]-3-hydroxypropyl] ester (9CI) (CA INDEX NAME)



IT **961-07-9**, Deoxyguanosine
RL: ANT (Analyte); MFM (Metabolic formation); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative)
(inhibition of **hepatitis B** virus DNA polymerase by enantiomers of penciclovir triphosphate)
RN 961-07-9 HCAPLUS
CN Guanosine, 2'-deoxy- (6CI, 8CI, 9CI) (CA INDEX NAME)

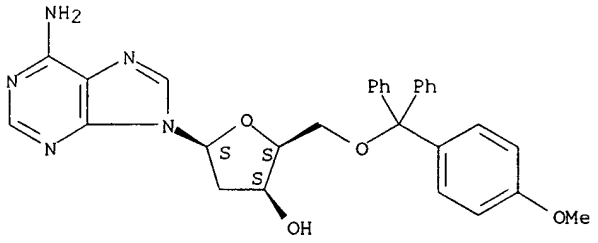
Absolute stereochemistry.



=> d bib abs hitstr 148 1

L48 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:667121 HCAPLUS
DN 130:32710
TI Unnatural .beta.-L-enantiomers of nucleoside analogs as potent anti-hepatitis B virus agents
AU Gosselin, G.; Boudou, V.; Griffon, J.-F.; Pavia, G.; Pierra, C.; Imbach, J.-L.; Faraj, A.; Sommadossi, J.-P.
CS Laboratoire Chimie Bioorganique, UMR CNRS 5625, Universite Montpellier II, Montpellier, 34095, Fr.
SO Nucleosides Nucleotides (1998), 17(9-11), 1731-1738
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
AB Several 2'- or 3'- substituted 2',3'-dideoxy-.beta.-L-nucleosides bearing adenine as the base were stereospecifically synthesized and their antiviral properties examd. Two of them, namely 2'-azido- and 3'-azido-2',3'-dideoxy-.beta.-L-adenosine had some antihepatitis B virus activity in cell cultures.
IT **216571-45-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of unnatural .beta.-L-enantiomers of nucleoside analogs as anti-**hepatitis B** virus agents)
RN 216571-45-8 HCAPLUS
CN 9H-Purin-6-amine, 9-[2-deoxy-5-O-[(4-methoxyphenyl)diphenylmethyl]-.beta.-L-threo-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

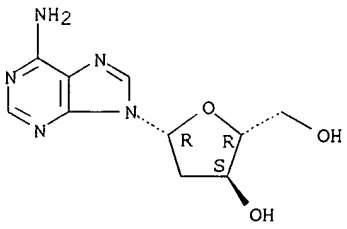


RE.CNT 17
RE
(2) Bolon, P; Bioorg Med Chem Lett 1996, V6, P1657 HCAPLUS
(4) Faraj, A; Antimicrob Agents Chemother 1994, V38, P2300 HCAPLUS
(5) Furman, P; Antiviral Chem Chemother 1995, V6, P345 HCAPLUS
(6) Gosselin, G; Antimicrob Agents Chemother 1994, V38, P1292 HCAPLUS
(7) Gosselin, G; C R Acad Sci Sciences de la vie 1994, V317, P85 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr 148 2

L48 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:922514 HCAPLUS
DN 124:117852
TI Nucleic Acid-Related Compounds. 88. Efficient Conversions of Ribonucleosides into Their 2',3'-Anhydro, 2'(and 3')-Deoxy, 2',3'-Didehydro-2',3'-dideoxy, and 2',3'-Dideoxynucleoside Analogs
AU Robins, Morris J.; Wilson, John S.; Madej, Danuta; Low, Nicholas H.; Hansske, Fritz; Wnuk, Stanislaw F.
CS Department of Chemistry, University of Alberta, Edmonton, AB, Can.
SO J. Org. Chem. (1995), 60(24), 7902-8
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Treatment of purine, pyrimidine, and modified purine (antibiotic) ribonucleosides with 2-acetoxy-2-methylpropanoyl (.alpha.-acetoxyisobutyryl) bromide in acetonitrile gave mixts. of 2',3'-bromohydrin acetates with different O5' substituents. Significant amts. of 5'-unprotected (hydroxyl) bromo acetates were obtained in some cases, and formation of 2',3'-O-isopropylidene derivs. as minor byproducts was detected for the first time. Acid-catalyzed nucleophilic displacement of chloride by bromide occurred with 2-amino-6-chloropurine riboside, but no substitution of fluoride by bromide was detected with 6-amino-2-fluoropurine riboside. Treatment of the trans bromo acetate mixts. obtained from purine-type nucleosides with Dowex 1 .times. 2 (OH-) in methanol gave the 2',3'-anhydro (ribo epoxide) compds. Radical-mediated hydrogenolytic debromination and deprotection gave 2'- and 3'-deoxynucleosides. Treatment of the bromo acetate mixts. with zinc-copper couple or acetic acid-activated zinc effected reductive elimination, and deprotection gave 2',3'-didehydro-2',3'-dideoxy compds. which were hydrogenated to give 2',3'-dideoxynucleosides. A no. of these analogs have potent inhibitory activity against AIDS and hepatitis B viruses (no data). New 13C NMR data for several types of unsatd.-sugar nucleosides are tabulated. These procedures are directly applicable for the prepn. of L-didehydro-dideoxy and L-dideoxy nucleoside analogs.
IT **958-09-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. inhibitory activity against AIDS and **hepatitis B** viruses of dideoxynucleoside analogs)
RN 958-09-8 HCAPLUS
CN Adenosine, 2'-deoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L51 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:260065 HCAPLUS
DN 132:288757
TI Selective eradication of virally infected cells by combined use of a cytotoxic agent and an antiviral agent
IN Korant, Bruce D.
PA Du Pont Pharmaceuticals Company, USA
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

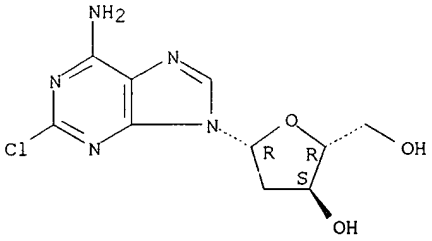
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000021565	A1	20000420	WO 1999-US23192	19991005
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, VN, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9965088	A1	20000501	AU 1999-65088	19991005
PRAI	US 1998-103922		19981013		
	WO 1999-US23192		19991005		

AB A method for treating human immunodeficiency virus (HIV) infection in a mammal comprises administering to the mammal a therapeutically effective amt. of a combination of: (i) at least one cytotoxic agent and (ii) at least one nonnucleoside reverse transcriptase HIV inhibitor. Also provided is a method of treating chronic viral infections comprising administering to the mammal a therapeutically effective amt. of a combination of: (i) at least one cytotoxic agent and (ii) at least one antiviral agent.

IT **4291-63-8**, Cladribine **36791-04-5D**, Virazole, mixt. with Interferon .alpha. **82410-32-0**, Gancyclovir **104227-87-4**, Famciclovir **106941-25-7**, Adefovir **127759-89-1**, Lobucavir **134678-17-4**, Lamivudine
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic agent-antiviral agent combination for selective eradication of virally infected cells)

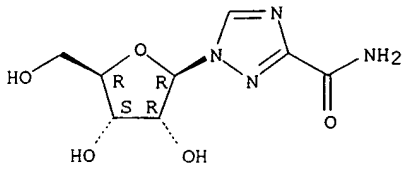
RN 4291-63-8 HCAPLUS
CN Adenosine, 2-chloro-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

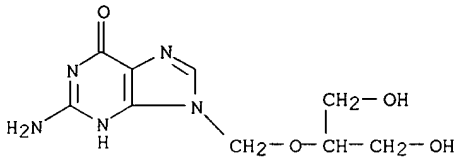


RN 36791-04-5 HCAPLUS
CN 1H-1,2,4-Triazole-3-carboxamide, 1-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)

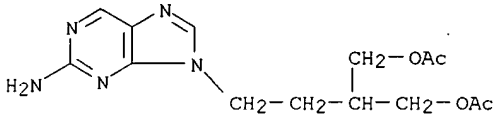
Absolute stereochemistry.



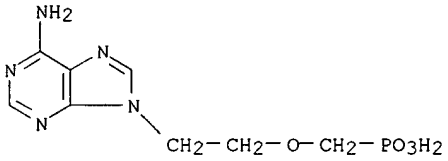
RN 82410-32-0 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



RN 104227-87-4 HCAPLUS
CN 1,3-Propanediol, 2-[2-(2-amino-9H-purin-9-yl)ethyl]-, diacetate (ester) (9CI) (CA INDEX NAME)

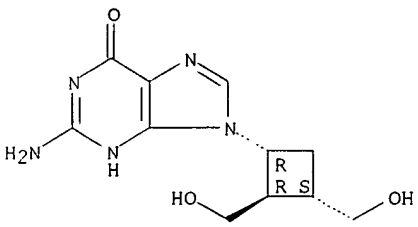


RN 106941-25-7 HCAPLUS
CN Phosphonic acid, [[2-(6-amino-9H-purin-9-yl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



RN 127759-89-1 HCAPLUS
CN 6H-Purin-6-one, 2-amino-9-[(1R,2R,3S)-2,3-bis(hydroxymethyl)cyclobutyl]-1,9-dihydro- (9CI) (CA INDEX NAME)

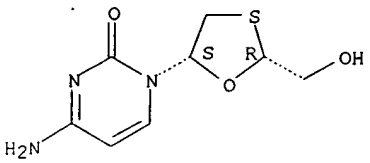
Absolute stereochemistry.



RN 134678-17-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-

yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 1
RE
(1) Merck & Co; EP 0617968 A 1994 HCAPLUS

=> d bib abs hitstr 152 1

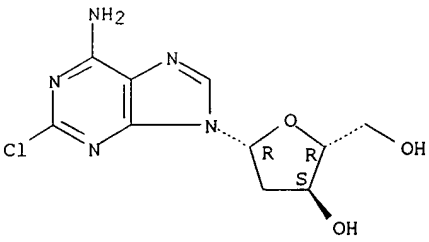
L52 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:688272 HCAPLUS
DN 133:280563
TI Human antibodies that bind human IL-12 and methods for producing
IN Salfeld, Jochen G.; Roguska, Michael; Paskind, Michael; Banerjee, Subhashis; Tracey, Daniel E.; White, Michael; Kaymakcalan, Zehra; Labkovsky, Boris; Sakorafas, Paul; Friedrich, Stuart; Myles, Angela; Veldman, Geertruida M.; Venturini, Amy; Warne, Nicholas W.; Widom, Angela; Elvin, John G.; Duncan, Alexander R.; Derbyshire, Elaine J.; Carmen, Sara; Smith, Stephen; Holtet, Thor Las; Du, Fou Sarah L.
PA Basf A.-G., Germany; Genetics Institute Inc.; et al.
SO PCT Int. Appl., 377 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000056772	A1	20000928	WO 2000-US7946	20000324

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-126603 19990325
AB Human antibodies, preferably recombinant human antibodies, that specifically bind to human interleukin-12 (hIL-12) are disclosed. Preferred antibodies have high affinity for hIL-12 and neutralize hIL-12 activity in vitro and in vivo . An antibody of the invention can be a full-length antibody or an antigen-binding portion thereof. The antibodies, or antibody portions, of the invention are useful for detecting hIL-12 and for inhibiting hIL-12 activity, e.g., in a human subject suffering from a disorder in which hIL-12 activity is detrimental. Nucleic acids, vectors and host cells for expressing the recombinant human antibodies of the invention, and methods of synthesizing the recombinant human antibodies, are also encompassed by the invention.
IT **4291-63-8**, Cladribine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(recombinant human antibodies that bind human IL-12 for treatment of autoimmune diseases and inflammatory diseases)
RN 4291-63-8 HCAPLUS
CN Adenosine, 2-chloro-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 7
RE
(2) Carter, R; HYBRIDOMA 1997, V16(4), P363 HCAPLUS
(3) Genentech Inc; WO 9404679 A 1994 HCAPLUS
(4) Genetics Inst; WO 9524918 A 1995 HCAPLUS
(5) Irving, R; IMMUNOTECHNOLOGY 1996, V2(2), P127 HCAPLUS

(6) Pini, A; JOURNAL OF IMMUNOLOGICAL METHODS 1997, V206(1-2), P171 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

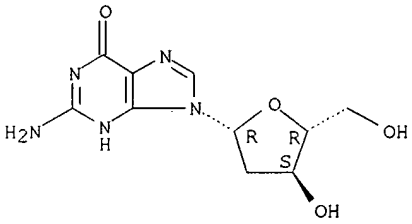
=> d bib abs hitstr 152 2

L52 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:794325 HCAPLUS
DN 132:30814
TI Methods of treatment of viral infections using carbocyclic deoxyguanosine analogs
IN Montgomery, John A.; Secrist, John A., III; Bennett, L. Lee; Parker, William B.; Shealy, Y. Fumer; Scheer, David I.
PA Southern Research Institute, USA
SO U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 776,895.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6001840	A	19991214	US 1993-20220	19930219
	US 6080746	A	20000627	US 1991-776895	19911016
	WO 9418979	A2	19940901	WO 1994-US1783	19940222
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 684822	A1	19951206	EP 1994-909709	19940222
	R: DE, FR, GB				

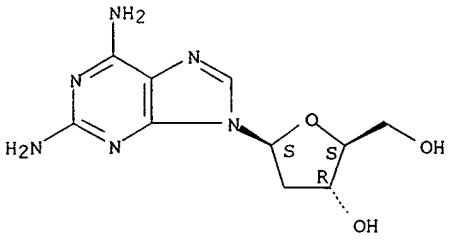
PRAI US 1990-489458 19900306
US 1991-776895 19911016
US 1993-20220 19930219
WO 1994-US1783 19940222
OS MARPAT 132:30814
AB A method for prophylaxis and treatment of a viral infections is characterized by the administration of a compn. comprising a substantial molar excess of the D-stereoisomer of 2'-CdG over the L-stereoisomer.
IT **961-07-9**, Deoxyguanosine
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(carbocyclic deoxyguanosine analog for treatment of viral infections)
RN 961-07-9 HCAPLUS
CN Guanosine, 2'-deoxy- (6CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **244097-87-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction; carbocyclic deoxyguanosine analog for treatment of viral infections)
RN 244097-87-8 HCAPLUS
CN 9H-Purine-2,6-diamine, 9-(2-deoxy-.beta.-L-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 83
RE
(1) Anon; EP 0236935 1987 HCAPLUS
(2) Anon; EP 219838 1987 HCAPLUS
(3) Anon; EP 236935 1987 HCAPLUS
(4) Anon; WO 8804662 1988 HCAPLUS
(5) Anon; EP 0322854 1989 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

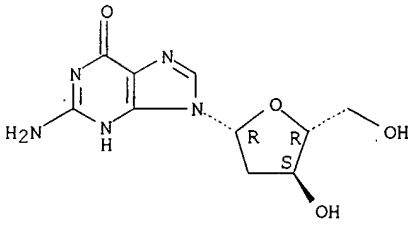
=> d bib abs hitstr 152 3

L52 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:330004 HCAPLUS
DN 130:349365
TI Controlled pore glass-synthetic resin membrane
IN Wong, Yuan N.; Chen, Richard
PA CPG, Inc., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5904848	A	19990518	US 1996-604440	19960221

AB Particulate inorg. pore material, e.g., controlled pore glass (CPG) embedded porous synthetic resin membrane is prepd. by mixing inorg. pore material and an aq. resin, preferably polytetrafluoroethylene (PTFE), aq. dispersion to form a paste-like mass, heating the mass at 50-70.degree.., and forming the mass into a sheet by calendering. The sheet is then sintered to produce a rigid porous sheet. The membrane may be functionalized, as by silanization. The membrane is useful for the same purposes as controlled pore glass or functionalized controlled pore glass. CPG-embedded PTFE was treated with aminopropyltriethoxysilane, with glutaraldehyde and with protein A to prep. a membrane disk for affinity chromatog. The disk was used to purify rabbit IgG.
IT **961-07-9DP**, immobilized on CPG/PTFE membranes
RL: SPN (Synthetic preparation); PREP (Preparation)
(controlled pore glass-synthetic resin membrane)
RN 961-07-9 HCAPLUS
CN Guanosine, 2'-deoxy- (6CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 6
RE
(1) Bonaventura; US 4609383 1986 HCAPLUS
(2) Errede; US 4373519 1983 HCAPLUS
(3) Hagen; US 4971736 1990
(4) Kawai; US 5158680 1992 HCAPLUS
(5) Koester; US 4923901 1990 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

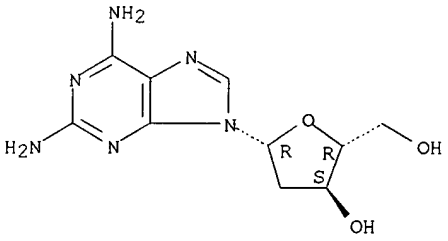
=> d bib abs hitstr l52 4

L52 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:470070 HCAPLUS
DN 127:76006
TI Compositions and methods of developing oligonucleotides and oligonucleotide analogs having antiviral activity
IN Wang, Jin-Feng; Pan, Weihua
PA Penn State Research Foundation, USA
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9720072	A1	19970605	WO 1996-US18921	19961127
	W: AU, CA, JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5856085	A	19990105	US 1995-566216	19951201
	AU 9711241	A1	19970619	AU 1997-11241	19961127
PRAI	US 1995-566216		19951201		
	WO 1996-US18921		19961127		

AB Methods of identifying and prepg. nucleic acid compds. that bind to RSV and potentially have anti-viral activity are disclosed, as well as nucleic acid compns. having anti-viral activity. The methods comprise iterative binding, sepg. and amplifying of nucleic acids or nucleic acid analogs (SELEX) using an intact virus as the receptor mol.
IT **4546-70-7D**, 2-Amino-2'-deoxyadenosine, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods of developing oligonucleotides and oligonucleotide analogs having antiviral activity)
RN 4546-70-7 HCAPLUS
CN Adenosine, 2-amino-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs hitstr 152 5

L52 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1993:143019 HCAPLUS
DN 118:143019
TI Triplex-forming oligomers containing modified bases
IN Froehler, Brian; Krawczyk, Steven; Matteucci, Mark D.; Milligan, John
PA Gilead Sciences, Inc., USA
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9209705	A1	19920611	WO 1991-US8811	19911125
	W: AU, CA, FI, JP, KR, NO, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9190949	A1	19920625	AU 1991-90949	19911125
	EP 558634	A1	19930908	EP 1992-901107	19911125
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				

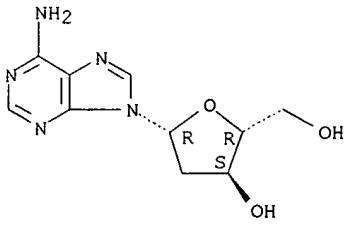
PRAI US 1990-617907 19901123
US 1991-643382 19910118
US 1991-683420 19910408
US 1991-686544 19910417
US 1991-686546 19910417
US 1991-686547 19910417
US 1991-766733 19910927
WO 1991-US8811 19911125

AB Oligomers are provided contg. .gtoreq.1 modified nucleotide residue that specifically forms a triplet with the G-C-doublet in forming a triplex with a target DNA duplex. The binding is maintained at neutral pH. The modified nucleotide residues have base components which provide donor H to each of the acceptable electron pairs at positions O6 and N7 of guanosyl residues at neutral pH. The oligomers may also have regions of inverted polarity and/or crosslinking moieties. The oligomers may be used to detect duplex DNA in a biol. sample and for disease treatment. Oligomer sequences are disclosed for binding to virus sequences, genes for mediators of inflammation, and their receptors, etc. Synthesis of modified nucleosides, prepn. of oligomers, and triple-helix footprint assays using the oligomers are described.

IT **958-09-8**, Deoxyadenosine
RL: RCT (Reactant)
(reaction of, in modified nucleoside prepn. for oligomer for triple helix formation)

RN 958-09-8 HCAPLUS
CN Adenosine, 2'-deoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

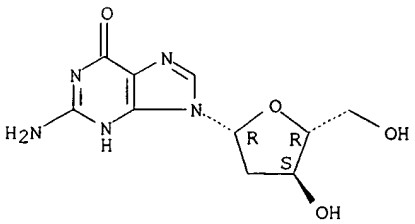
Absolute stereochemistry.



=> d bib abs hitstr l52 6

L52 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1992:584333 HCAPLUS
DN 117:184333
TI Nucleobase transporter-mediated permeation of 2',3'-dideoxyguanosine in human erythrocytes and human T-lymphoblastoid CCRF-CEM cells
AU Gati, Wendy P.; Paterson, Alan R. P.; Tyrrell, David L. J.; Cass, Carol E.; Moravek, Josef; Robins, Morris J.
CS Dep. Pharmacol., Univ. Alberta, Edmonton, AB, T6G 2H7, Can.
SO J. Biol. Chem. (1992), 267(31), 22272-6
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB Several 2',3'-dideoxynucleosides (ddNs), agents that inhibit the replication of human immunodeficiency virus and **hepatitis B** virus, enter mammalian cells by simple diffusion. In this report, the authors show that the membrane permeation of 2',3'-dideoxyguanosine (ddG) in human erythrocytes and CCRF-CEM cells, in contrast with that of other ddNs, is transporter-mediated. Inward fluxes of ddG in both cell types were inhibited by adenine, hypoxanthine, and acyclovir, but not by inhibitors of nucleoside transport (nitrobenzylthioinosine, dipyridamole, dilazep). Fluxes of ddG in human erythrocytes were attributable to a single, rate-saturable process (Km, 380 .+-. 90 .mu.M and Vmax, 7.9 .+-. 0.8 pmol/s/.mu.L cell water) that was competitively inhibited by adenine (Ki, 16 .mu.M). These results showed that ddG entered human erythrocytes and CCRF-CEM cells by a transporter-mediated process that was also the basis for entry of purine nucleobases. In contrast, inward fluxes of 2,6-diaminopurine-2',3'-dideoxyriboside (ddDAPR), a prodrug of ddG, were not affected by purine nucleobases or nucleoside transport inhibitors in either cell type. Thus, the permeation properties of ddDAPR resembled those of 2',3'-dideoxyadenosine, a diffusional permeant (cell uptake is transporter-independent), and contrasted with those of ddG, the deamination product of ddDAPR. This study demonstrated that the nucleobase moiety of ddNs is an important determinant of membrane permeation.
IT **961-07-9**, 2'-Deoxyguanosine
RL: BIOL (Biological study)
(dideoxyguanosine transport by human erythrocytes and T-lymphoblastoid CCRF-CEM cells response to)
RN 961-07-9 HCAPLUS
CN Guanosine, 2'-deoxy- (6CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

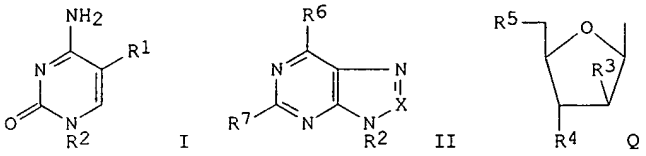


=> d bib abs hitstr l52 7

L52 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1991:559680 HCAPLUS
DN 115:159680
TI Preparation of antiviral pyrimidine and purine nucleosides and pharmaceutical compositions containing them
IN Matthes, Eckart; Von Janta-Lipinski, Martin; Reimer, Karen; Mueller, Werner; Meisel, Helga; Lehmann, Christine; Schildt, Juergen
PA Akademie der Wissenschaften der DDR, Ger. Dem. Rep.
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 409227	A2	19910123	EP 1990-113851	19900719
EP 409227	A3	19911204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DD 293498	A5	19910905	DD 1989-331051	19890720
JP 03148292	A2	19910625	JP 1990-191856	19900719
PRAI DD 1989-331051	19890720			

OS MARPAT 115:159680
GI

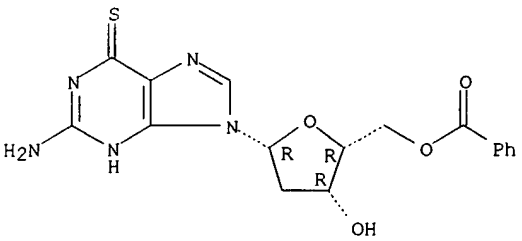


AB The title compds. [I; II; R1 = CHO, NH2, OH, SH, halo, etc.; R2 = 2,3-didehydro-2,3-dideoxyribofuranosyl, arabinofuranosyl, Q; R3 = H, OH; R4 = H, F, Cl, NH2, N3; R5 = OH, OAc, palmitoyloxy, alkanoyloxy, etc.; R6, R7 = H, OH, F, Cl, Br, NH2 SH, etc.; X = CH, N], esp. useful against **hepatitis B** virus, were prepd.. 1-(5-O-Acetyl-2,3-dideoxy-3-fluoro-.beta.-D-ribofuranosyl)-5-methyl-cytosine in CCl4 was treated over 6 h with Br under illumination from a photolamp at reflux; the product was refluxed with MeOH contg. MeONa for 20 min to give 1-(2,3-dideoxy-3-fluoro-.beta.-D-ribofuranosyl)-5-formylcytosine. Most I and II showed ID50 of 0.04-26 .mu.M against **hepatitis B** virus polymerase. Tablets and injections contg. I and II were formulated.

IT **134379-87-6**
RL: RCT (Reactant)
(reaction of, in prepn. of antiviral nucleosides)

RN 134379-87-6 HCAPLUS
CN 6H-Purine-6-thione, 2-amino-9-(5-O-benzoyl-2-deoxy-.beta.-D-threo-pentofuranosyl)-1,9-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

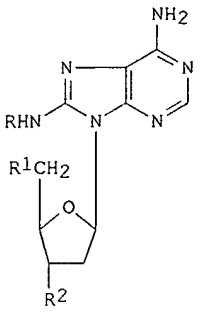


=> d bib abs hitstr l52 8

L52 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1988:489339 HCAPLUS
DN 109:89339
TI Nucleic acid probes containing 2'-deoxyadenosine derivatives
IN Huynh Dinh Tam; Sarfati, Simon; Igolen, Jean; Guesdon, Jean Luc
PA Institut Pasteur, Fr.
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 254646	A1	19880127	EP 1987-401710	19870722
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	FR 2601956	A1	19880129	FR 1986-10630	19860722
	FR 2601956	B1	19891103		
	WO 8800593	A1	19880128	WO 1987-FR291	19870722
	W: JP, US				
	JP 01500353	T2	19890209	JP 1987-504442	19870722
PRAI	FR 1986-10630	19860722			
	WO 1987-FR291	19870722			

OS MARPAT 109:89339
GI



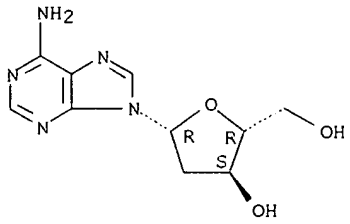
I

AB Nucleic acid probes contain 2'-deoxyadenosine derivs. I (R = aminoalkyl; R1 = OH, OPO3H2, OP2O6H3, OP3O9H4, oligonucleotide; R2 = H, OH, oligonucleotide, polynucleotide). N-[N-1-Biotinyl-10-decyl]-2'-deoxyadenosine triphosphate, prepd. from 8-bromo-2'-deoxyadenosine, 1,10-diaminodecane, and biotin N-hydroxysuccinimide ester in 6 steps, was enzymically incorporated by nick translation into plasmid pCP10 contg. 2 parts of the **hepatitis B** virus genome. In the presence of 0.2 mM biotinylated compd., 14% of the adenosines were substituted in 300 ng of the plasmid, using DNA polymerase I of Escherichia coli.

IT **958-09-8D**, derivs.
RL: ANST (Analytical study)
(polynucleotide hybridization probe contg.)

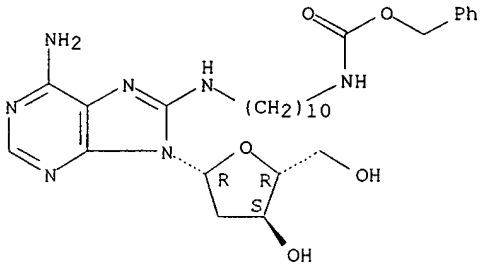
RN 958-09-8 HCAPLUS
CN Adenosine, 2'-deoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



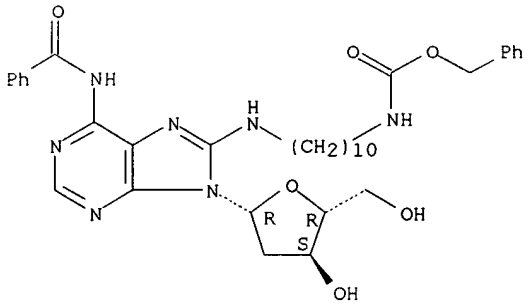
IT **115244-09-2P 115244-10-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of nucleic acid hybridization probes)
RN 115244-09-2 HCAPLUS
CN Carbamic acid, [10-[[6-amino-9-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-9H-purin-8-yl]amino]decyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

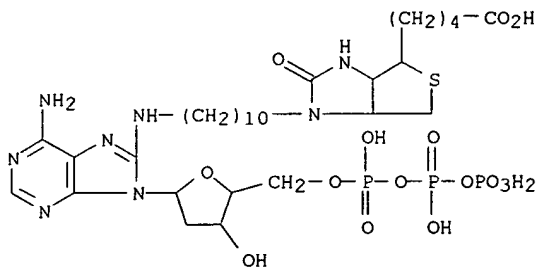


RN 115244-10-5 HCAPLUS
CN Carbamic acid, [10-[[6-(benzoylamino)-9-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-9H-purin-8-yl]amino]decyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **115538-90-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of and polynucleotide labeling with)
RN 115538-90-4 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, 1-[10-[[6-amino-9-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-D-erythro-pentofuranosyl]-9H-purin-8-yl]amino]decyl]hexahydro-2-oxo-, [3aS-(3a.alpha.,4.beta.,6a.alpha.)]- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 163 1

L63 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:814263 HCAPLUS
DN 133:359222
TI Method for controlling the fidelity and the process-execution of reverse transcriptase by incorporating and polymerizing nucleotide analogues acceptable as substrates for reverse transcription without blocking elongation
IN Derrien, Valerie; Reiss, Claude
PA Centre National de la Recherche Scientifique (Cnrs), Fr.
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

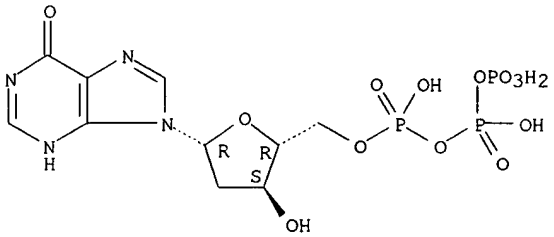
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000067698	A2	20001116	WO 2000-FR1260	20000510
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2793413	A1	20001117	FR 1999-5905	19990510
PRAI FR 1999-5905		19990510		

AB The invention concerns the use of nucleotide analogs, defined as mols. acceptable as substrate for reverse transcription and enabling the addn. of at least one supplementary nucleotide to the polynucleotide chain during synthesis to affect and/or take over control of the fidelity and process-execution of the reverse transcription. The invention also concerns a pharmaceutical compn. contg. said nucleotide analogs.

IT **16595-02-1**, DITP **134678-17-4**, 3TC **143491-54-7**, FTC
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(controlling the fidelity and the process-execution of reverse transcriptase by incorporating and polymg. nucleotide analogs acceptable as substrates for reverse transcription without blocking elongation)

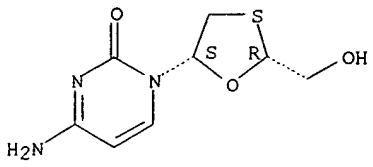
RN 16595-02-1 HCAPLUS
CN Inosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



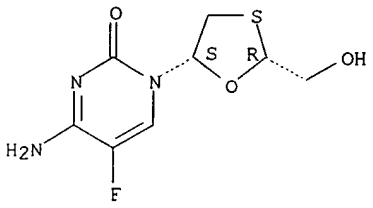
RN 134678-17-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 143491-54-7 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> d bib abs hitstr l63 2

L63 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:260065 HCAPLUS
DN 132:288757
TI Selective eradication of virally infected cells by combined use of a cytotoxic agent and an antiviral agent
IN Korant, Bruce D.
PA Du Pont Pharmaceuticals Company, USA
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

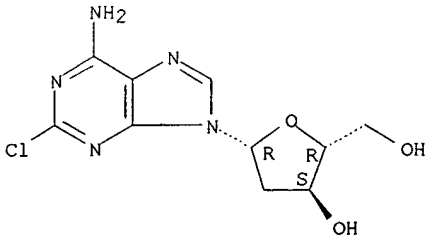
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000021565	A1	20000420	WO 1999-US23192	19991005
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, VN, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9965088	A1	20000501	AU 1999-65088	19991005
PRAI	US 1998-103922		19981013		
	WO 1999-US23192		19991005		

AB A method for treating human immunodeficiency virus (HIV) infection in a mammal comprises administering to the mammal a therapeutically effective amt. of a combination of: (i) at least one cytotoxic agent and (ii) at least one nonnucleoside reverse transcriptase HIV inhibitor. Also provided is a method of treating chronic viral infections comprising administering to the mammal a therapeutically effective amt. of a combination of: (i) at least one cytotoxic agent and (ii) at least one antiviral agent.

IT **4291-63-8**, Cladribine **36791-04-5D**, Virazole, mixt. with Interferon .alpha. **82410-32-0**, Gancyclovir **104227-87-4**, Famciclovir **106941-25-7**, Adefovir **127759-89-1**, Lobucavir **134678-17-4**, Lamivudine
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic agent-antiviral agent combination for selective eradication of virally infected cells)

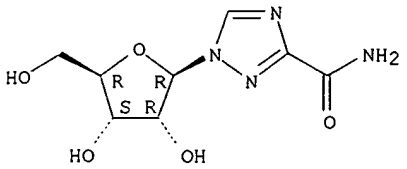
RN 4291-63-8 HCAPLUS
CN Adenosine, 2-chloro-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

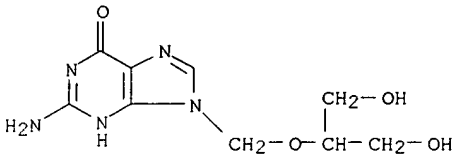


RN 36791-04-5 HCAPLUS
CN 1H-1,2,4-Triazole-3-carboxamide, 1-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)

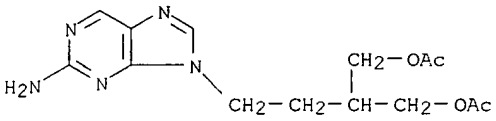
Absolute stereochemistry.



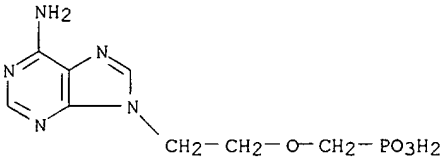
RN 82410-32-0 HCAPLUS
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



RN 104227-87-4 HCAPLUS
CN 1,3-Propanediol, 2-[2-(2-amino-9H-purin-9-yl)ethyl]-, diacetate (ester) (9CI) (CA INDEX NAME)

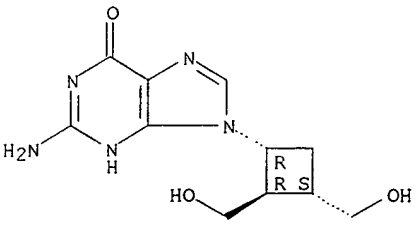


RN 106941-25-7 HCAPLUS
CN Phosphonic acid, [[2-(6-amino-9H-purin-9-yl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



RN 127759-89-1 HCAPLUS
CN 6H-Purin-6-one, 2-amino-9-[(1R,2R,3S)-2,3-bis(hydroxymethyl)cyclobutyl]-1,9-dihydro- (9CI) (CA INDEX NAME)

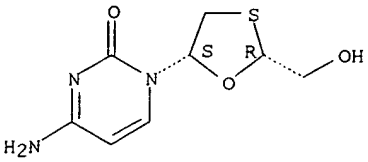
Absolute stereochemistry.



RN 134678-17-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-

yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 1
RE
(1) Merck & Co; EP 0617968 A 1994 HCAPLUS

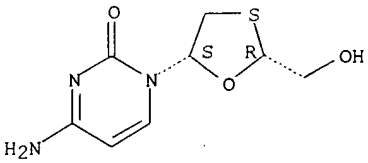
=> d bib abs hitstr l63 3

L63 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:509110 HCAPLUS
DN 129:104199
TI Enhanced suppression of HIV-1 by the combination of cytidine nucleoside analogs and CTP synthase inhibitors
IN Gao, Wen-yi; Johns, David G.; Mitsuya, Hiroaki; Marquez, Victor
PA United States Dept. of Health and Human Services, USA
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9831375	A1	19980723	WO 1998-US784	19980120
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9858255	A1	19980807	AU 1998-58255	19980120
PRAI	US 1997-33918		19970121		
	WO 1998-US784		19980120		

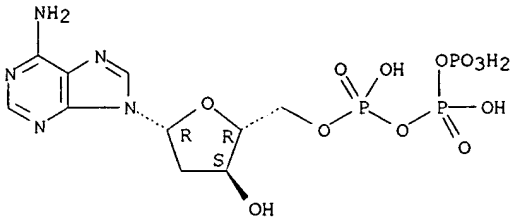
AB A method is disclosed to increase the potency of cytidine-based anti-HIV drugs using CTP synthase inhibitors, and to overcome resistance of human immunodeficiency virus (HIV) to cytidine-based anti-HIV drugs using CTP synthase inhibitors.
IT **134678-17-4**, 3TC
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytidine nucleoside analog-CTP synthase inhibitor combination for inhibition of retrovirus or virus using reverse transcriptase)
RN 134678-17-4 HCAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,5S)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



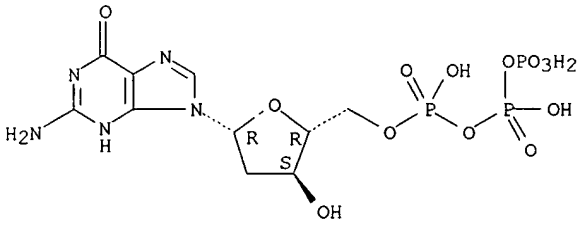
IT **1927-31-7**, Deoxyadenosine triphosphate **2564-35-4**, Deoxyguanosine triphosphate
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(pool; cytidine nucleoside analog-CTP synthase inhibitor combination for inhibition of retrovirus or virus using reverse transcriptase)
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 2564-35-4 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs hitstr l64 1

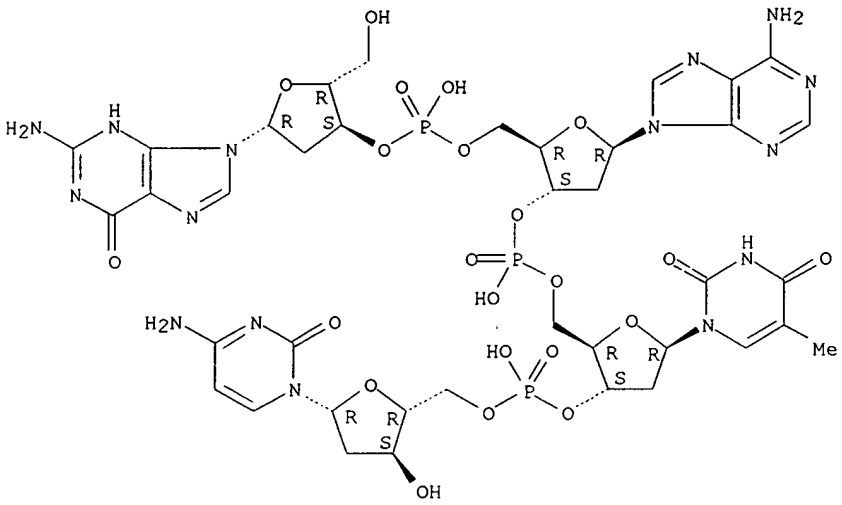
L64 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:553436 HCAPLUS
DN 133:163028
TI Compositions and methods for treating and preventing pathogenic bacterial infection based on the essential role of DNA methylation in bacterial virulence
IN Mahan, Michael J.; Heithoff, Douglas M.; Low, David A.; Sinsheimer, Robert L.
PA Regents of the University of California, USA
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000045840	A1	20000810	WO 2000-US2866	20000202

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-241951 19990202
US 1999-305603 19990505
AB The present invention is directed towards vaccine compns. contg. pathogenic bacteria such as Salmonella having non-reverting genetic mutations which alter activity of DNA adenine methylase (Dam) and methods using these compns. to elicit an immune response. The invention also provides methods for prepg. vaccines as well as screening methods to identify agents which may have anti-bacterial activity.
IT **92206-27-4**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (binding site sequence; compns. comprising pathogenic bacteria contg. altered DNA adenine methylase as vaccine for treating and preventing pathogenic bacterial infection and for screening anti-bacterial agent)
RN 92206-27-4 HCAPLUS
CN Cytidine, 2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxyadenylyl-(3'.fwdarw.5')-thymidylyl-(3'.fwdarw.5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

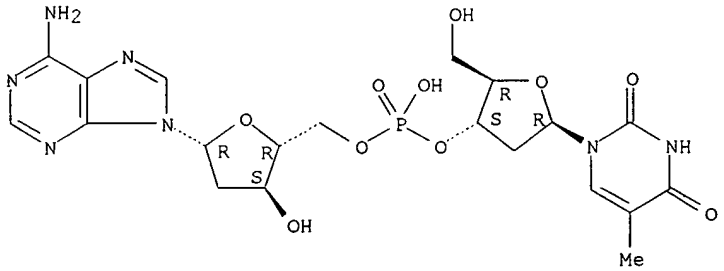


RE.CNT 6
RE
(1) Braaten, B; CELL 1994, V76(3), P577 HCAPLUS
(2) Brawer, R; ARCHIVES OF MICROBIOLOGY 1998, V169(6), P530 HCAPLUS
(3) Cardenas, L; CLINICAL MICROBIOLOGY REVIEWS 1992, V5(3), P328 MEDLINE
(5) Heithoff, D; SCIENCE (WASHINGTON D C) 1999, V284(5416), P967 HCAPLUS
(6) Torreblanca, J; GENETICS 1996, V144(1), P15 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l64 2

L64 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:279350 HCAPLUS
DN 133:190351
TI Reduced transcription and progeny virus production of **hepatitis B** virus containing an 8-bp deletion in basic core promoter
AU Kohno, Kazuhiro; Nishizono, Akira; Terao, Hideo; Hiraga, Masaharu; Mifune, Kumato
CS Department of Microbiology, Oita Medical University, Oita, 879-5593, Japan
SO J. Med. Virol. (2000), 61(1), 15-22
CODEN: JMVIDB; ISSN: 0146-6615
PB Wiley-Liss, Inc.
DT Journal
LA English
AB Previously, the presence of an 8-bp deletion mutant, spanning from nt. 1768 to nt. 1775 in the basic core promoter region of **hepatitis B** virus (HBV) from patients in the anti-HBe-pos. asymptomatic phase before developing acute exacerbation after immunosuppressive treatment was demonstrated. The transcription and progeny virus prodn. activities of the mutant were examd. by transfection of the recombinant plasmid [pUC Del(2)] contg. the head-to-tail dimer DNA of the mutant into HepG2 cells. The amts. of **hepatitis B** surface antigen (HBsAg) and HBe antigens secreted into the culture medium were markedly reduced. Southern blotting of DNAs extd. from the culture medium also showed reduced mutant activity to produce progeny virus. Northern blotting and RNase protection assay of RNAs extd. from transfected cells demonstrated that the transcription of both precore mRNA and pregenome RNA was reduced compared to that of wild-type HBV. The promoter activity examd. by transfection of the CAT plasmid contg. deletion mutant DNA was much lower than that of wild-type. Co-transfection expts., however, of the CAT plasmid contg. wild-type DNA with pUC Del(2) reduced CAT activity induced by wild-type, suggesting that truncated X protein produced by the mutant does not possess a sufficient transactivating activity. Gel shift assay using HepG2 nuclear ext. and a probe contg. four TA-rich regions in CP and various competitors suggested that the lack of the third TA-rich region was responsible for the transcription redn. of precore mRNA and pregenome RNA. The possible mechanisms are discussed.
IT **19192-40-6**
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(reduced transcription and progeny virus prodn. of **hepatitis B** virus contg. an 8-bp deletion in the basic core promoter)
RN 19192-40-6 HCAPLUS
CN Adenosine, thymidylyl-(3'.fwdarw.5')-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



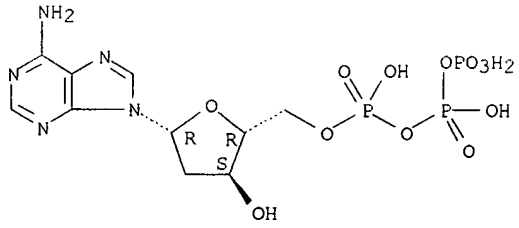
RE.CNT 27
RE
(1) Buckwold, V; J Virol 1996, V70, P5845 HCAPLUS
(3) Chen, I; J Virol 1995, V69, P3647 HCAPLUS
(5) Fukuda, R; J Infect Dis 1995, V172, P1191 HCAPLUS

(6) Fukuda, R; Microbiol Immunol 1996, V40, P481 HCAPLUS
(7) Ganem, D; Ann Rev Biochem 1987, V56, P651 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l64 3

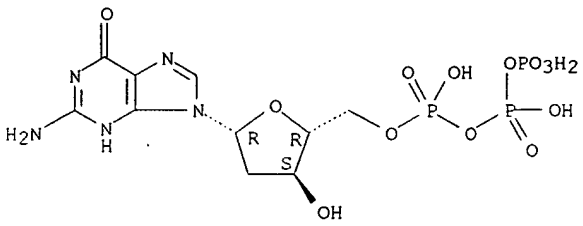
L64 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:216890 HCAPLUS
DN 133:1440
TI Nucleotide insertion fidelity of human **hepatitis B** viral polymerase
AU Kim, Younhee; Hong, Young Bin; Suh, Se Won; Jung, Guhung
CS Department of Oriental Medicine, Semyung University, Chungbuk, 390-711, S. Korea
SO J. Biochem. Mol. Biol. (2000), 33(2), 126-132
CODEN: JBMBE5; ISSN: 1225-8687
PB Springer-Verlag Singapore Pte. Ltd.
DT Journal
LA English
AB The hepadnaviruses replicate their nucleic acid through a reverse transcription step. The MBP-fused HBV polymerase was expressed in E. coli and purified by using amylose affinity column chromatog. The purified protein represented DNA-dependent DNA polymerase activity. In this report, the MBP-HBV polymerase was shown to lack 3'.fwdarw.5' exonuclease activity, like other retroviral RTs. The ratio of the insertion efficiency for the wrong vs. right base pairs indicates the misinsertion frequency (f). The nucleotide insertion fidelity (1/f), obsd. with the MBP-HBV polymerase and HIV-1 RT, was between 60 and 54,000, and between 50 and 73,000, resp., showing that they are in close range. A relatively efficient nucleotide incorporation by the MBP-HBV polymerase was obsd. with a specificity of three groups: (1) A:T, T:A>C:G, G:C (matched pairs), (2) A:C, C:A>G:T, T:G (purine-pyrimidine and pyrimidine-purine mispairs), and (3) C:C, A:A, G:G, T:T>T:C, C:T>A:G, G:A (purine-purine or pyrimidine-pyrimidine mispairs), and their order is (1)>(2)>(3). The data from the nucleotide insertion fidelity by the MBP-HBV polymerase suggest that the HBV polymerase may be as error-prone as HIV-1 RT.
IT **1927-31-7**, Datp **2564-35-4**, DGTP
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(nucleotide insertion fidelity of human **hepatitis B** viral polymerase)
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 2564-35-4 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 43
RE
(1) Bakhanashvili, M; FEBS Letter 1992, V306, P151 HCAPLUS
(2) Boosalis, M; J Biol Chem 1987, V262, P14689 HCAPLUS
(3) Chang, L; J Virol 1990, V64, P5553 HCAPLUS
(7) Drosopoulos, W; J Virol 1996, V70, P4834 HCAPLUS
(9) Ganem, D; Annu Rev Biochem 1987, V56, P651 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l64 4

L64 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:117205 HCAPLUS
DN 132:177728
TI Method of using a single probe to hybridize with multiple imperfectly matched nucleic acid sequences from virus or oncogene variants and its use in medical diagnosis
IN Lane, Michael J.; Benight, Albert S.; Faldasz, Brian D.
PA TM Technologies, Inc., USA
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000008211	A2	20000217	WO 1999-US17650	19990804
WO 2000008211	A3	20000803		

W: JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

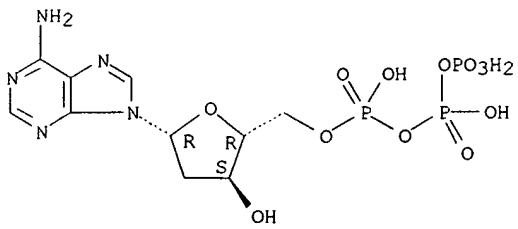
PRAI US 1998-95313 19980804
US 1999-366085 19990803

AB The invention relates to the method of using a single probe to hybridize with multiple imperfectly matched nucleic acid sequences from virus or oncogene variants and its use in medical diagnosis using an intercalating compd. to stabilize mismatches. A com. probe with a hairpin loop structure and 3' 15-nt "dangling end" was used to test 5 32P labeled perfectly matched or mismatched single-stranded DNA mols from **hepatitis B** virus. The probe was biotinylated at the U residue in the middle of the stem for the attachment to streptavidin-coated microtiter plates to capture the hybridized duplex mols before PAGE anal. The detection of the target mols. was studied in the presence of four DNA binding ligands including actinomycin D, distamycin D, ethidium bromide and SSB. The hybridization conditions, specifically the concn. of ligands, special combination of the ligands, hybridization time and denaturation conditions are investigated to promote the hybridization of a nucleic acid probe with a target nucleic acid sequence which is not perfectly matched to the probe. The method might be useful in medical diagnosis for AIDS or other viral infections caused by virus variants and genetic disorders caused by oncogene variants.

IT **1927-31-7**, DATP **2564-35-4**, DGTP
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); USES (Uses)
(method of using single probe to hybridize with multiple imperfectly matched nucleic acid sequences from virus or oncogene variants and its use in medical diagnosis)

RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

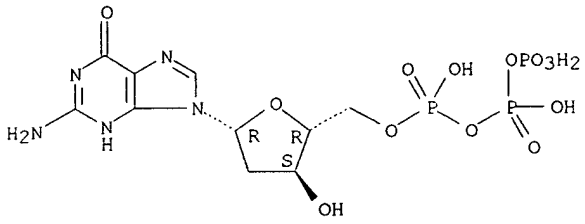
Absolute stereochemistry.



RN 2564-35-4 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX

NAME)

Absolute stereochemistry.



=> d bib abs hitstr l64 5

L64 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:763900 HCAPLUS
DN 132:11626
TI CpG oligonucleotides and other adjuvants for inducing mucosal immunity
IN McCluskie, Michael J.; Davis, Heather L.
PA Loeb Health Research Institute At the Ottawa Hospital, Can.; CPG Immunopharmaceuticals, Inc.
SO PCT Int. Appl., 116 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

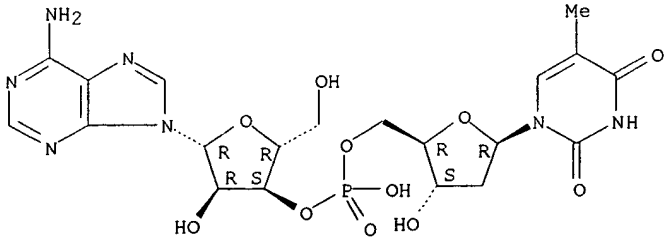
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9961056	A2	19991202	WO 1999-US11359	19990521
	WO 9961056	A3	20000406		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9941977	A1	19991213	AU 1999-41977	19990521
PRAI	US 1998-86393		19980522		
	WO 1999-US11359		19990521		

AB The authors disclose the use of immunostimulatory oligonucleotides contg. a CpG motif for inducing mucosal immunity. The CpG immunostimulatory oligonucleotides may be administered alone or in combination with antigen and/or with other adjuvants. In one example, mice were immunized with **hepatitis B** virus S protein aerosol in conjunction with either cholera toxin or CpG oligonucleotide. A local and systemic IgG response was obsd. using either adjuvant; cholera toxin in combination with CpG oligonucleotide induced a distant mucosal (sIgA) response. In addn., these adjuvants induced a cytotoxic T-cell response to the antigen that was not obsd. on immunization with antigen alone.

IT **21062-82-8D**, CpG oligonucleotides-contg. **39797-93-8D**, GpT, CpG oligonucleotides-contg.
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for stimulation of mucosal immune response)

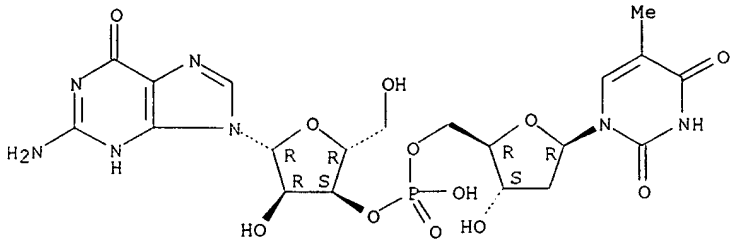
RN 21062-82-8 HCAPLUS
CN Thymidine, adenylyl-(3'.fwdarw.5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



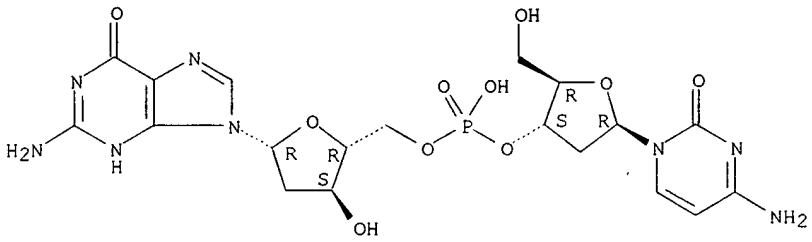
RN 39797-93-8 HCAPLUS
CN Thymidine, guanylyl-(3'.fwdarw.5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **15178-66-2D,** d(CpG), oligonucleotides-contg.
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stimulation of mucosal immunity by)
RN 15178-66-2 HCAPLUS
CN Guanosine, 2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

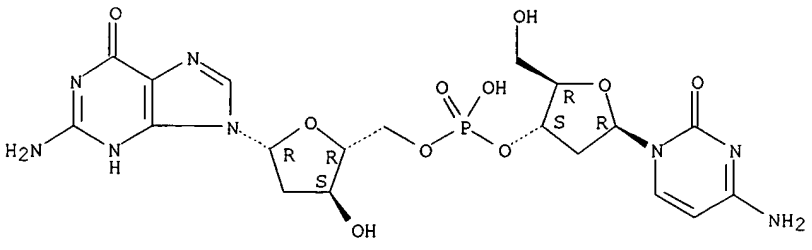
Absolute stereochemistry.



=> d bib abs hitstr l64 6

L64 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:512295 HCAPLUS
DN 131:270644
TI Priming MHC-I-restricted cytotoxic T lymphocyte responses to exogenous **hepatitis B** surface antigen is CD4+ T cell dependent
AU Wild, Jens; Grusby, Michael J.; Schirmbeck, Reinhold; Reimann, Jorg
CS Department of Medical Microbiology, University of Ulm, Ulm, D-89081, Germany
SO J. Immunol. (1999), 163(4), 1880-1887
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB MHC-I (Ld)-restricted, S28-39-specific CTL responses are efficiently primed in H-2d BALB/c mice injected with low doses of native **hepatitis B** surface Ag (HBsAg) lipoprotein particles without adjuvants. Priming of this CTL response by exogenous HBsAg required CD4+ T cell "help" and IL-12: this CTL response could be neither induced in mice depleted of CD4+ T cells by in vivo Ab treatment, nor in (CD4+ T cell-competent or CD4+ T cell-depleted) IL-12-unresponsive STAT4-/- knockout BALB/c mice. Codelivery of oligonucleotides (ODN) with immunostimulating CpG sequences (ISS) with exogenous HBsAg reconstituted the CTL response to exogenous HBsAg in CD4+ T cell-depleted normal mice and in CD4+ T cell-competent and CD4+ T cell-depleted STAT4-/- BALB/c mice. Injection (by different routes) of "naked" pCI/S plasmid DNA encoding HBsAg into IL-12-responsive or -unresponsive BALB/c mice efficiently primed the MHC-I-restricted, HBsAg-specific CTL response. CTL priming was not detectable when CD4+ T cell-depleted animals were subjected to genetic immunization. In vivo priming of the well-characterized CD8+ CTL response to HBsAg in "high responder" BALB/c mice either by exogenous surface lipoprotein particles or by DNA vaccination is thus CD4+ T cell dependent. CTL priming by exogenous HBsAg, but not by genetic immunization, is IL-12 dependent. The dependence of CTL priming by exogenous HBsAg on CD4+ T cells can be overcome by codelivering ODN with ISS motifs, and this "adjuvants effect" operates efficiently in IL-12-unresponsive mice. The data characterize a feature of the adjuvant effect of ISS-contg. ODN on CTL priming that may be of major interest for the design of CTL-stimulating vaccines with efficacy in immunodeficiency conditions.
IT **15178-66-2D**, d(CpG), phosphorothioate oligodeoxyribonucleotides-contg.
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(CD4+ T-cell dependence for priming of cytotoxic T-cell response to **hepatitis B** surface antigen can be compensated by)
RN 15178-66-2 HCAPLUS
CN Guanosine, 2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



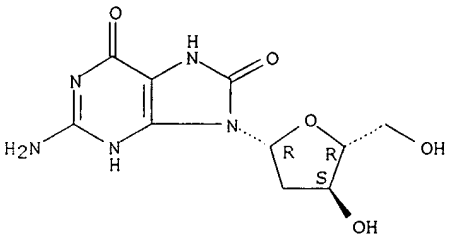
RE.CNT 80
RE
(1) Andrus, L; J Exp Med 1984, V159, P647 HCAPLUS

(2) Bennett, S; J Exp Med 1997, V186, P65 HCAPLUS
(3) Bennett, S; Nature 1998, V393, P478 HCAPLUS
(9) Bohm, W; J Immunol 1998, V161, P897 HCAPLUS
(11) Bohm, W; Vaccine 1998, V16, P949 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l64 7

L64 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:143365 HCAPLUS
DN 130:336228
TI Metallothionein Overexpression Suppresses Hepatic Hyperplasia Induced by **Hepatitis B** Surface Antigen
AU Quaife, Carol J.; Cherne, Russell L.; Newcomb, Terry G.; Kapur, Raj P.; Palmiter, Richard D.
CS Howard Hughes Medical Institute and Department of Biochemistry, University of Washington, Seattle, WA, 98195, USA
SO Toxicol. Appl. Pharmacol. (1999), 155(2), 107-116
CODEN: TXAPA9; ISSN: 0041-008X
PB Academic Press
DT Journal
LA English
AB Transgenic mice that express the viral coat proteins of **hepatitis B** virus (HBV) in the liver display hepatocellular damage, inflammation, regeneration, hyperplasia, and, eventually, neoplasia that is similar to that of people with chronic, active hepatitis caused by HBV infection. Hepatocellular regeneration, in the context of chronic injury and inflammation, is thought to expose dividing cells to excessive oxygen radicals, which are believed to lead to DNA damage and, ultimately, neoplasia. Because metallothioneins scavenge free radicals in vitro, we generated mice that express excess (>10-fold) metallothionein I (MT-I* mice) and the HBV surface antigens (HBsAg) to ascertain whether MT-I* would ameliorate aspects of the pathol. induced by HBsAg. Markers of hepatocyte injury and tumorigenesis in HBsAg mice were compared to those in double transgenic (HBsAg and MT-I*) mice. Hepatic hyperplasia, histol., aneuploidy, and accumulation of an oxidative DNA adduct, 8-oxo-2'-deoxyguanosine, were examd. Although hepatitis and neoplasia were not prevented by MT-I* expression in the HBsAg mice, there was less hyperplasia and less aneuploidy. We conclude that MT-I produces a beneficial effect in this in vivo model of HBV-induced hepatitis. (c) 1999 Academic Press.
IT **88847-89-6**, 8-Oxo-2'-deoxyguanosine
RL: BOC (Biological occurrence); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence)
(metallothionein I inhibition of hepatic hyperplasia induced by **hepatitis B** surface antigen)
RN 88847-89-6 HCAPLUS
CN Guanosine, 2'-deoxy-7,8-dihydro-8-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 54
RE
(1) Ames, B; Proc Natl Acad Sci USA 1993, V90, P7915 HCAPLUS
(2) Bauman, J; Toxicol Appl Pharmacol 1991, V110, P347 HCAPLUS
(7) Cherian, M; Toxicol Appl Pharmacol 1994, V126, P1 HCAPLUS
(8) Chisari, F; Cell 1989, V59, P1145 HCAPLUS
(9) Chisari, F; Proc Natl Acad Sci USA 1987, V84, P6909 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l64 8

L64 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:789027 HCAPLUS
DN 130:37294
TI Vectors and methods for immunization or therapeutic protocols
IN Davis, Heather L.; Krieg, Arthur M.; Schorr, Joachim; Wu, Tong
PA Ottawa Civic Hospital Loeb Research Institute, Can.; University of Iowa Research Foundation; Qiagen G.m.b.H.
SO PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9852581	A1	19981126	WO 1998-US10408	19980520
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9876908	A1	19981211	AU 1998-76908	19980520
EP 1003531	A1	20000531	EP 1998-924828	19980520
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI US 1997-47209 19970520
US 1997-47233 19970520
WO 1998-US10408 19980520

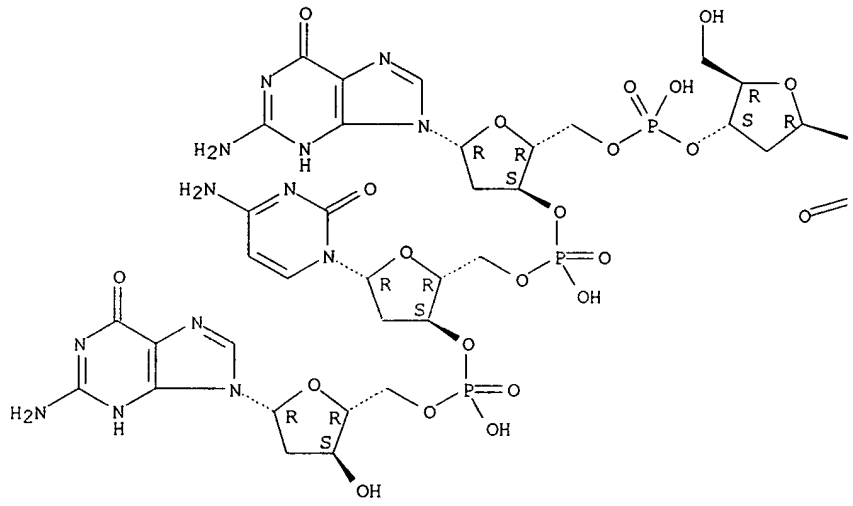
AB The present invention shows that DNA vaccine vectors can be improved by removal of CpG-N motifs and optional addn. of CpG-S motifs. In addn., for high and long-lasting levels of expression, the optimized vector should include a promoter/enhancer that is not down-regulated by the cytokines induced by the immunostimulatory CpG motifs. The invention also provides improved gene therapy vectors by detg. the CpG-N and CpG-S motifs present in the construct, removing stimulatory CpG (CpG-S) motifs and/or inserting neutralizing CpG (CpG-N) motifs, thereby producing a nucleic acid construct providing enhanced expression of the therapeutic polypeptide. The therapeutic polypeptide is selected from the group consisting of growth factors, toxins, tumor suppressors, cytokines, apoptotic proteins, interferons, hormones, clotting factors, ligands and receptors. Vectors and methods of use of such vectors for immunostimulation are also included herein.

IT **58927-25-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(DNA vaccine vector with removal of neutralizing CpG motifs and insertion of stimulatory CpG motifs as well as promoter/enhancer for enhancing expression of therapeutic protein)

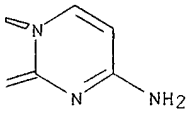
RN 58927-25-6 HCAPLUS
CN Guanosine, 2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 3
RE
(1) Davis; US 5780448 A 1998 HCAPLUS
(2) Klinman, D; J Immunol 1997, V158, P3635 HCAPLUS
(3) Sato, Y; Science 1996, V273, P352 HCAPLUS

=> d bib abs hitstr l64 9

L64 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:146541 HCAPLUS
DN 128:176937
TI In situ hybridization using complexes of probes and RecA proteins
IN Zarling, David A.; Calhoun, Cornelia J.; Sena, Elissa P.
PA Daikin Industries, Ltd., Japan
SO U.S., 29 pp. Cont.-in-part of U.S. 5,506,098.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5719023	A	19980217	US 1994-199326	19940603
	US 5506098	A	19960409	US 1991-755291	19910904
	WO 9305177	A1	19930318	WO 1992-JP1128	19920903

W: AU, CA, FI, JP, KR, NO, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE

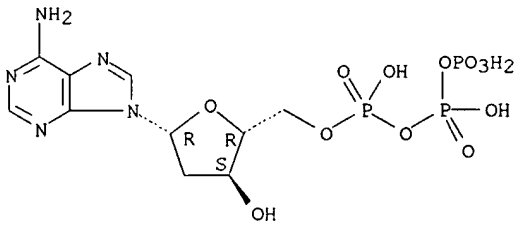
PRAI US 1991-755291 19910904
WO 1992-JP1128 19920903

AB A method in situ hybridization to fixed cells that does not require heat denaturation of the target DNA and with kinetics not limited by target copy no. is described. The method uses probes stably bound to recA protein and optionally labeled with a reporter group. The complex is stabilized by prepn. in the presence of ATP.gamma.S. The method can also be used for viable cells and so can be used as a criterion in fluorescence-activated cell sorting.

IT **1927-31-7**, DATP
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(stabilizer; in situ hybridization using complexes of probes and RecA proteins)

RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

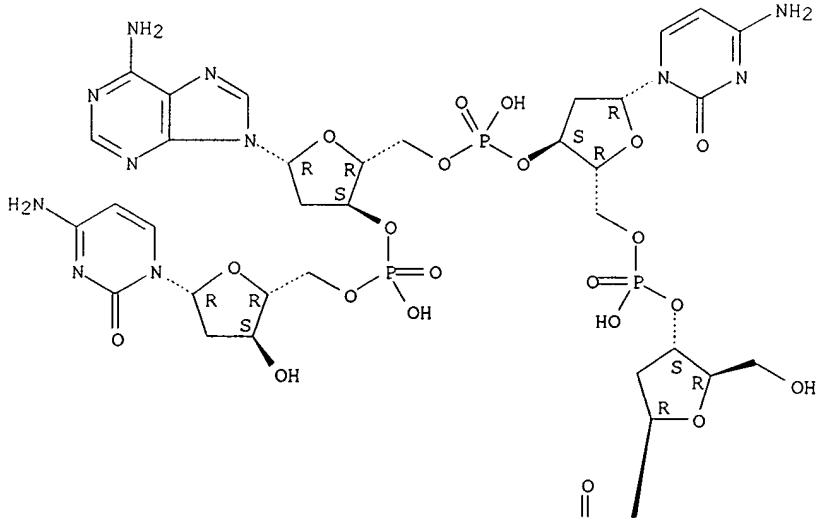


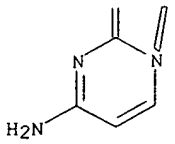
=> d bib abs hitstr l64 10

L64 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:69935 HCAPLUS
DN 128:201718
TI A negative regulatory element and its binding protein in the upstream of enhancer II of **hepatitis B** virus
AU Park, Geon Tae; Yi, Yong Won; Choi, Cheol Yong; Rho, Hyune Mo
CS Dep. Mol. Biol. Res. Cent. Cell Differentiation, Seoul Natl. Univ., Seoul, 151-742, S. Korea
SO DNA Cell Biol. (1997), 16(12), 1459-1465
CODEN: DCEBE8; ISSN: 1044-5498
PB Mary Ann Liebert, Inc.
DT Journal
LA English
AB The **hepatitis B** virus (HBV) core/pregenomic promoter is regulated by enhancer I (ENI) and enhancer II (ENII) which are located upstream of the initiation sites of core/pregenomic transcripts. In this study, we identified a neg. regulatory element (NRE) (nt 1576 to 1639) upstream of ENII by serial deletion anal.; a 33 kDa cellular protein in HepG2 cells binds to this element. The NRE has a significant activity if it is located upstream of ENII in HepG2 cells. Mutational anal. showed that the sequence (5'-CCAC-3') from nt 1612 to 1615 is responsible for the repression activity of NRE. Southwestern blotting and UV-crosslinking assays with HepG2 nuclear exts. also demonstrated that the 33 kDa protein in HepG2 cells binds to the sequence. It, thus, appears that the 33 kDa protein is responsible for the repression activity of NRE.
IT **143189-07-5**
RL: BOC (Biological occurrence); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(NRE; neg. regulatory element and its binding protein in upstream of enhancer II of **hepatitis B** virus)
RN 143189-07-5 HCAPLUS
CN Cytidine, 2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyadenylyl-(3'.fwdarw.5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

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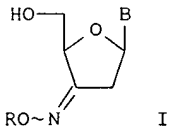
H2N

=> d bib abs hitstr l64 11

L64 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:42411 HCAPLUS
DN 128:115199
TI Preparation of 3'-oximino-2',3'-dideoxynucleosides and their derivatives as antiviral agents
IN Fedorov, Ivan Igorevich; Gosselin, Gilles; De Clercq, Eric; Balzarini, Jan; Sommadossi, Jean-pierre; Imbach, Jean-louis; Kazmina, Ema Maximovna; Arzamastsev, Alexandr Pavlovich; Gurskaya, Galina Viktorovna; et al.
PA Fedorov, Ivan Igorevich, Russia; Gosselin, Gilles; De Clercq, Eric; Balzarini, Jan; Sommadossi, Jean-Pierre; Imbach, Jean-Louis; Kazmina, Ema Maximovna; Arzamastsev, Alexandr Pavlovich; Gurskaya, Galina Viktorovna
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA Russian
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9749717	A1	19971231	WO 1997-RU201	19970624
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	RU 2111970	C1	19980527	RU 1996-112760	19960625
	AU 9734676	A1	19980114	AU 1997-34676	19970624
PRAI	RU 1996-112760	19960625			
	WO 1997-RU201	19970624			

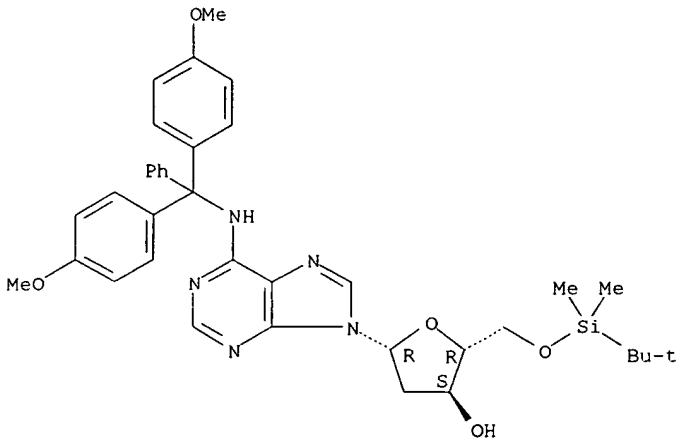
OS MARPAT 128:115199
GI



I

AB 3'-Oximino-2',3'-dideoxynucleosides I [B = (un)substituted thymin-1-yl, uracil-1-yl, cytosin-1-yl, adenin-9-yl, guanin-9-yl; R = alkyl, acyl] were prepd. as antiviral agents. Thus, (E)-3'-oximino-2',3'-dideoxythymidine was prepd. from 3'-keto-2',3'-dideoxythymidine by protection of the 5' position by monomethoxytrityl, reaction with hydroxylamine hydrochloride, and deprotection. The product is active against the human immunodeficiency virus (HIV), the B hepatitis virus and the herpes simplex virus.
IT **201601-21-0**
RL: RCT (Reactant)
(prepn. of oximinodideoxynucleosides and their derivs. as antiviral agents)
RN 201601-21-0 HCAPLUS
CN Adenosine, N-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-5'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
Ph
NH
MeO
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O
R
R
S
OH
Me
Me
Si
Bu-t
O

=> d bib abs hitstr l64 12

L64 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:126062 HCAPLUS
DN 126:235447
TI Chemiluminescence method for determining adenine after reaction with an alkyl glyoxal compound
AU Sato, Naofumi; Shirakawa, Kamon; Sugihara, Keisuke; Kanamori, Tosinori
CS Biosciences Research Laboratory, Mochida Pharmaceutical Co. Ltd., Tokyo, 115, Japan
SO Anal. Sci. (1997), 13(1), 59-65
CODEN: ANSCEN; ISSN: 0910-6340
PB Japan Society for Analytical Chemistry
DT Journal
LA English
AB In a DMF soln. of the products of a reaction between adenine and an alkyl glyoxal deriv. in the presence of an acid catalyst, chemiluminescence occurs when NaOH soln. is added. This method is highly sensitive, specific to compds. contg. adenine, and produces no chemiluminescent products whatsoever in reactions with guanine and other nucleic acid bases other than adenine. The detection range for adenine in this reaction is 1.0 .times. 10-2-1.0 .times. 10-7M, and the detection limit is 1.4 .times. 10-8M (7.0 .times. 10-14 mol per assay). The combined use of polymerase chain reaction amplification enabled as little as 10 pg DNA to be detected.
IT **24939-09-1**, Poly (dA)(dT) **25191-20-2**, Poly dA
RL: ANT (Analyte); ANST (Analytical study)
(adenine detn. by chemiluminescence after reaction with alkyl glyoxal)
RN 24939-09-1 HCAPLUS
CN 5'-Adenylic acid, 2'-deoxy-, homopolymer, complex with 5'-thymidylic acid homopolymer (1:1) (9CI) (CA INDEX NAME)

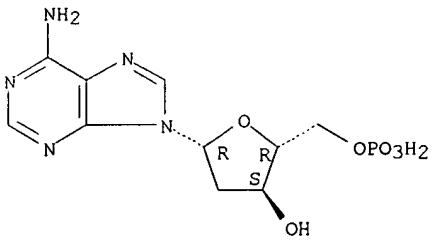
CM 1

CRN 25191-20-2
CMF (C10 H14 N5 O6 P)x
CCI PMS

CM 2

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



CM 3

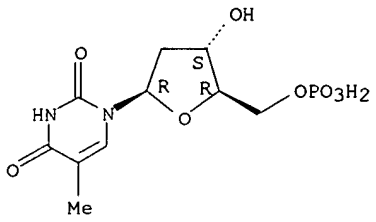
CRN 25086-81-1
CMF (C10 H15 N2 O8 P)x
CCI PMS

CM 4

CRN 365-07-1
CMF C10 H15 N2 O8 P

CDES 5:B-D-ERYTHRO

Absolute stereochemistry.

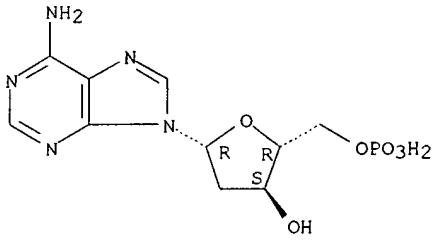


RN 25191-20-2 HCAPLUS
CN 5'-Adenylic acid, 2'-deoxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 653-63-4
CMF C10 H14 N5 O6 P

Absolute stereochemistry. Rotation (+).



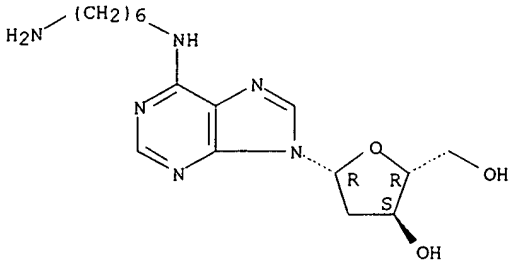
=> d bib abs hitstr l64 13

L64 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:161185 HCAPLUS
DN 124:197760
TI Photocleavable agents and conjugates for the detection and isolation of biomolecules.
IN Rothschild, Kenneth J.; Sonar, Sanjay M.; Olejnik, Jerzy
PA USA
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9531429	A1	19951123	WO 1995-US5555	19950511
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
	US 5643722	A	19970701	US 1994-240511	19940511
	US 5986076	A	19991116	US 1994-345807	19941122
	CA 2189848	AA	19951123	CA 1995-2189848	19950511
	AU 9526359	A1	19951205	AU 1995-26359	19950511
	EP 763009	A1	19970319	EP 1995-921230	19950511
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10500409	T2	19980113	JP 1995-529698	19950511
PRAI	US 1994-240511	19940511			
	US 1994-345807	19941122			
	WO 1995-US5555	19950511			
	US 1995-345807	19951122			

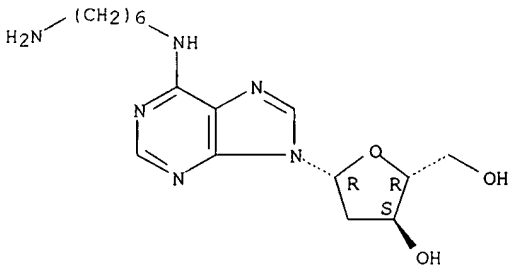
OS MARPAT 124:197760
AB This invention relates to agents and conjugates that can be used to detect and isolate target components from complex mixts. such as nucleic acids from biol. samples, cells from bodily fluids, and nascent proteins from translation reactions. Agents comprise a detectable moiety bound to a photoreactive moiety. Conjugates comprise agents coupled to substrates by covalent bonds which can be selectively cleaved with the administration of electromagnetic radiation. Target substances labeled with detectable mols. can be easily identified and sepd. from a heterologous mixt. of substances. Exposure of the conjugate to radiation releases the target in a functional form and completely unaltered. Using photocleavable mol. precursors as the conjugates, label can be incorporated into macromols., the nascent macromols. isolated, and the label completely removed. The invention also relates to targets isolated with these conjugates which may be useful as pharmaceutical agents or compns. that can be administered to humans and other mammals. Useful compns. include biol. agents such as nucleic acids, proteins, lipids and cytokines. Conjugates can also be used to monitor the pathway and half-life of pharmaceutical compns. in vivo and for diagnostic, therapeutic and prophylactic purposes. The invention also relates to kits comprised of agents and conjugates that can be used for the detection of diseases, disorders and nearly any individual substance in a complex background of substances.
IT **147218-60-8**
RL: RCT (Reactant)
(photocleavable agents and conjugates for detection and isolation of biomols.)
RN 147218-60-8 HCAPLUS
CN Adenosine, N-(6-aminohexyl)-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **147218-60-8DP**, photocleavable biotin conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(photocleavable agents and conjugates for detection and isolation of biomols.)
RN 147218-60-8 HCAPLUS
CN Adenosine, N-(6-aminohexyl)-2'-deoxy- (9CI) (CA INDEX NAME)

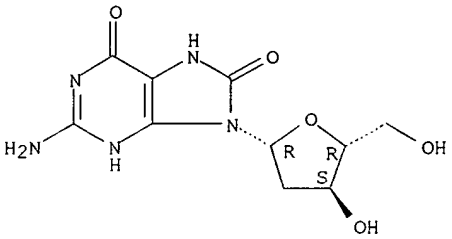
Absolute stereochemistry.



=> d bib abs hitstr l64 14

L64 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:284900 HCAPLUS
DN 122:78078
TI Extensive oxidative DNA damage in hepatocytes of transgenic mice with chronic active hepatitis destined to develop hepatocellular carcinoma
AU Hagen, Tory M.; Huang, Shaonan; Curnutte, John; Fowler, Patricia; Martinez, Violeta; Wehr, Carol M.; Ames, Bruce N.; Chisari, Francis V.
CS Division of Biochem. Molecular Biol., Univ. California, Berkeley, CA, 94720, USA
SO Proc. Natl. Acad. Sci. U. S. A. (1994), 91(26), 12808-12
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB A transgenic mouse strain that expresses the **hepatitis B** virus (HBV) large envelope protein in the liver was used to det. the extent of oxidative DNA damage that occurs during chronic HBV infection. This mouse strain develops a chronic necroinflammatory liver disease that mimics the inflammation, cellular hyperplasia, and increased risk for cancer that is evident in human chronic active hepatitis. When perfused in situ with nitroblue tetrazolium, an indicator for superoxide formation, the liver of transgenic mice displayed intense formazan deposition in Kupffer cells, indicating oxygen radical prodn., and S-phase hepatocytes were commonly seen adjacent to the stained Kupffer cells. Similar changes were not obsd. in nontransgenic control livers. To det. whether these events were assocd. with oxidative DNA damage, genomic DNA from the livers of transgenic mice and nontransgenic controls was isolated and examd. for 8-oxo-2'-deoxyguanosine, an oxidatively modified adduct of deoxyguanosine. Results showed a significant, sustained accumulation in steady-state 8-oxo-2'-deoxyguanosine that started early in life exclusively in the transgenic mice and increased progressively with advancing disease. The most pronounced increase occurred in livers exhibiting microscopic nodular hyperplasia, adenomas, and hepatocellular carcinoma. Thus, HBV transgenic mice with chronic active hepatitis display greatly increased hepatic oxidative DNA damage. Moreover, the DNA damage occurs in the presence of heightened hepatocellular proliferation, increasing the probability of fixation of the attendant genetic and chromosomal abnormalities and the development of hepatocellular carcinoma.
IT **88847-89-6**
RL: ADV (Adverse effect, including toxicity); BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(oxidative DNA damage in liver in chronic active hepatitis preceding hepatocellular carcinoma)
RN 88847-89-6 HCAPLUS
CN Guanosine, 2'-deoxy-7,8-dihydro-8-oxo- (9CI) (CA INDEX NAME)

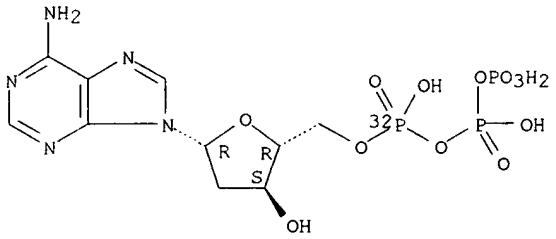
Absolute stereochemistry.



=> d bib abs hitstr l64 15

L64 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:128730 HCAPLUS
DN 120:128730
TI Comparison of two .alpha.-32P-dATP-labeled probes
AU Mi, Zhujun; Li, Xueyang; Wang, Guangcai; Han, Chunxue
CS Beijing Cent. Biochem. Immune Prod., Beijing, 100012, Peop. Rep. China
SO Tongweisu (1992), 5(3), 163-6
CODEN: TONGEM; ISSN: 1000-7512
DT Journal
LA Chinese
AB **Hepatitis B** virus (HBV) DNA probes, labeled by .alpha.-32P-dATP from England Amersham International PIC and from China Institute of At. Energy, were compared in specific activity, sensitivity, incorporated percentage, and stability in different temps. for storage. The same satisfactory results for the 2 probes were obtained. HBV DNA was detected in 551 and 518 sera samples.
IT **65401-86-7**
RL: ANST (Analytical study)
(**hepatitis B** virus DNA probes labeled by)
RN 65401-86-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate-P-32P), 2'-deoxy- (9CI) (CA INDEX NAME)

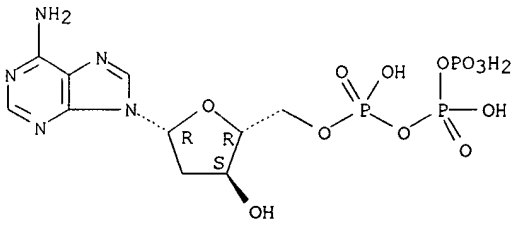
Absolute stereochemistry.



=> d bib abs hitstr 164 16

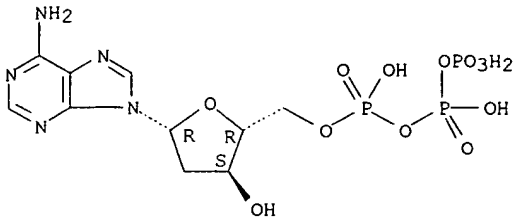
L64 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1989:208662 HCAPLUS
DN 110:208662
TI Labeling of oligonucleotide of **hepatitis B** virus (HBV) by terminal deoxynucleotidyl transferase (TdT)
AU Xu, Lin; Xie, Yanbo
CS Dep. Biochem., Sun Yatsen Univ. Med. Sci., Guangzhou, Peop. Rep. China
SO Shengwu Huaxue Zazhi (1989), 5(1), 12-18
CODEN: SHZAE4; ISSN: 1000-8543
DT Journal
LA Chinese
AB A new method is described for labeling of oligonucleotide probe of HBV. The oligonucleotide is a 21-nucleotide sequence 5'-(CTTCGCTTCACCTCTGCACGT). It is complementary to a region near the end of a single-stranded gap of HBV and contains the direct repeat sequence. The oligonucleotide was labeled with biotin-11-dUTP by TdT. The results revealed that after 2 h incubation, the labeling efficiency is the highest. Polymn. in the presence of 1 mM cobalt ion is better than polymn. in the presence of 10 mM cobalt ion or 10 mM magnesium ion. The polymn. in the presence of dNTP is better than the polymn. in the absence of dNTP. When biotin-11-dUTP is replaced by biotin-7-dATP, the efficiency of labeling decreases. For color development, two methods were used. The sensitivity of detection by preformed streptavidin-alk. phosphatase complex is higher than the sensitivity of detection by adding the streptavidin and biotinylated alk. phospatase in series. Using this biotinated oligonucleotide probe, as little as 25 pg of std. HBV DNA was detected. HBV DNA can also be detected in sera of **hepatitis B** patients by dot-blot hybridization.
IT **1927-31-7D**, reaction products with biotin
RL: ANST (Analytical study)
(in oligonucleotide labeling, for **hepatitis B** virus detection)
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



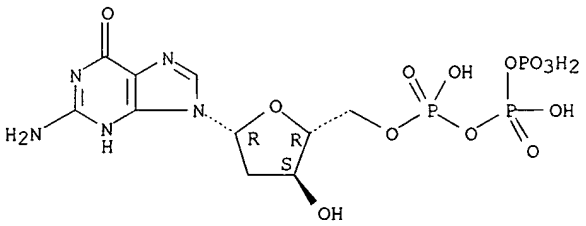
IT **1927-31-7**, DATP **2564-35-4**, DGTP
RL: ANST (Analytical study)
(oligonucleotide labeling response to, for **hepatitis B** virus detection)
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 2564-35-4 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs hitstr l64 17

L64 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1988:91387 HCAPLUS
DN 108:91387
TI Method and kit for detection of viruses by amplification and hybridization
IN Sninsky, John Joseph; Kwok, Shirley Lee; Mack, David Henry
PA Cetus Corp., USA
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 26

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 229701	A2	19870722	EP 1987-300203	19870109
	EP 229701	A3	19900307		
	EP 229701	B1	19950913		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
	CA 1279244	A1	19910122	CA 1986-525591	19861217
	AU 8767109	A1	19870716	AU 1987-67109	19870102
	AU 606043	B2	19910131		
	DK 8700107	A	19870711	DK 1987-107	19870109
	ZA 8700152	A	19880928	ZA 1987-152	19870109
	ES 2078214	T3	19951216	ES 1987-300203	19870109
	JP 62217161	A2	19870924	JP 1987-2648	19870110
	JP 2576980	B2	19970129		
	US 5008182	A	19910416	US 1989-394276	19890815
	US 5176995	A	19930105	US 1989-394145	19890815
	US 5386022	A	19950131	US 1993-92767	19930716
	JP 06233700	A2	19940823	JP 1993-336838	19931228
	JP 2574640	B2	19970122		
	US 5594123	A	19970114	US 1994-287385	19941024

PRAI	US 1986-818127	19860110
	US 1986-934955	19861126
	US 1986-935581	19861126
	US 1985-716975	19850328
	US 1985-791308	19851025
	US 1986-824044	19860130
	US 1986-828144	19860207
	US 1989-394276	19890815
	US 1991-639103	19910109
	US 1992-918907	19920722
	US 1993-92767	19930716

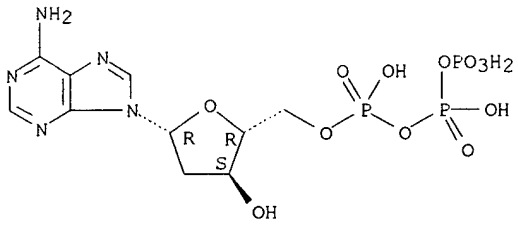
AB The presence or absence of a nucleic acid sequence assocd. with .gtoreq.1 related viruses in a sample is detected or monitored by (a) treating the sample, together or sep., with an oligonucleotide primer for each strand of nucleic acid sequence, 4 different nucleoside triphosphates, and an agent for polymn., under hybridizing conditions, such that for each strand an extension product of each primer is synthesized which is substantially complementary to each strand being detected or monitored, such that the extension product synthesized from 1 primer, when it is sepd. from its complement, can serve as a template for synthesis of the extension product of the other primer; (b) treating the sample under denaturing conditions to sep. the primer extension products from their templates; (c) treating the product of step (b) with oligonucleotide primers such that a primer extension product is synthesized using each of the single strands produced in (b) as a template, resulting in amplification of the sequence to be detected; and (d) detg. the sequence e.g. by labeled hybridization probe to the amplified product either free in soln. or after immobilization on a solid support. DNA was extd. from samples and amplified by addn. of synthesized 17-mer primers SK01 and SK02 (selected to provide amplification of 107 bases of nucleotides 900-1006 of human T-cell leukemia virus III [HTLV-III]-isolate BH10), dATP, dCTP, dGTP, TTP in Tris-HCl buffer (pH 7.5) contg. NaCl and MgCl2, treatment at 100.degree. for 10 min, cooling to room temp. for 2 min, treatment with 1 unit of Klenow fragment of Escherichia coli DNA polymerase for 2 min, and heating at 95.degree. for 2 min. The denaturation, primer annealing, and

extension with Klenow, 2 min/step, was repeated 19 times. Amplified DNA was heat denatured, hybridized with labeled probe, digested with BstNI, electrophoresed on a 30% polyacrylamide mini-gel, and autoradiographed. Only HTLV-III-contg. samples were pos.; HTLV-I, HTLV-II, and leukemia patient samples were neg.

IT **1927-31-7**, DATP **2564-35-4**, DGTP
RL: ANST (Analytical study)
(in virus detection by nucleic acid amplification and hybridization)

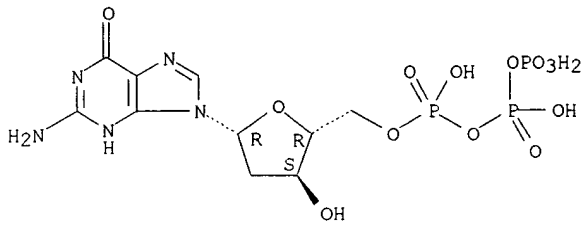
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 2564-35-4 HCAPLUS
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib abs hitstr l64 18

L64 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:98979 HCAPLUS
DN 106:98979
TI Modified DNA
IN Fukuda, Tsunehiko; Marumoto, Ryuji
PA Takeda Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

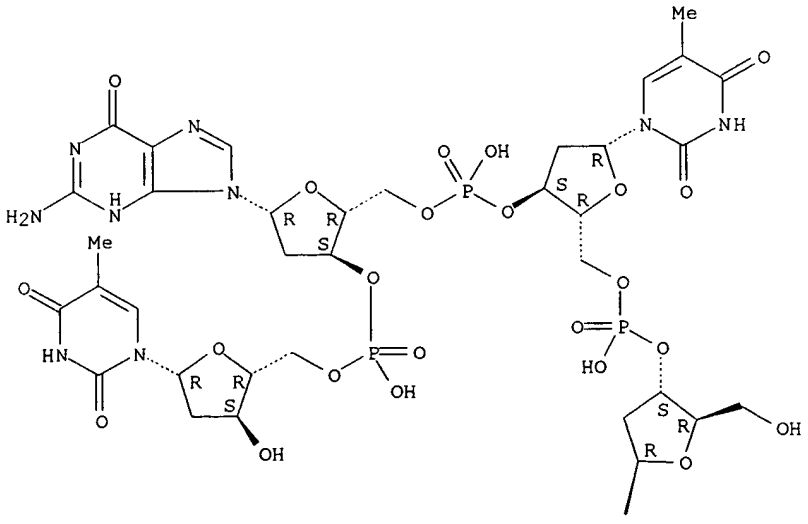
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60169495	A2	19850902	JP 1984-27775	19840215

AB Hapten-conjugated polydeoxynucleotides (hapten bonded at 5'-phosphate directly or through a linker), useful as reagents for detecting specific base sequences, are described. The conjugate is hybridized with sample polynucleotide immobilized in cells or carriers; then a fluorescent or enzymic marker is introduced and the photoresponse produced by photoexcitation or addn. of substrates is measured. Thus, 850 .mu.g (HO)2P(O)O-d(TCTTATGTAAGACCT) was treated with 2,4-dinitrophenyl (DNP)-ethylenediamine to give 200 .mu.g DNP-NHCH2CH2NHPO2-d(TCTTATGTAAGACCT) (I). Then, **hepatitis B** virus Adw gene-contg. plasmid pBR322 (pBR322-EcoRI/HBV933) was heated with a restriction enzyme and heated at 80.degree. for 3 h to give a modified DNA, which was hybridized with I. The hybrids were treated with rabbit anti-DNP-BSA (bovine serum albumin) serum, then treated with anti-rabbit IgG antibody labeled with horseradish peroxidase, treated with o-dianisidine and H2O2, and subjected to agarose gel electrophoresis. The band contg. the virus was red-brown in color, whereas the band contg. plasmid pBR322 was not colored.

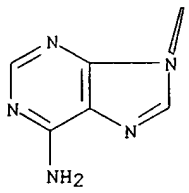
IT **80565-17-9**
RL: ANST (Analytical study)
(protected, condensation of, with bis(phenylamino) tetranucleotide)
RN 80565-17-9 HCAPLUS
CN Thymidine, 2'-deoxyadenylyl-(3'.fwdarw.5')-thymidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



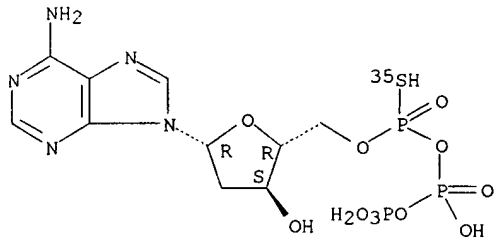
PAGE 2-A



=> d bib abs hitstr l64 19

L64 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:2529 HCAPLUS
DN 106:2529
TI Sulfur-35 labeling and sequencing the enzymic DNA fragment with "dideoxy" method
AU Qi, Zuhe; Song, Song; Xiong, Weijun
CS Inst. Basic Med. Sci., Chin. Acad. Med. Sci., Beijing, Peop. Rep. China
SO Shengwu Huaxue Yu Shengwu Wuli Jinzhan (1986), (4), 61-4
CODEN: SHYCD4; ISSN: 0253-9918
DT Journal
LA Chinese
AB The dideoxy method described by M. D. Biggin et al. (1983) which used 35S-labeled dATP and buffer gradient PAGE was investigated. Sample used was BglII restriction fragment of DNA of **hepatitis B** virus. Results were satisfactory.
IT **87092-22-6**
RL: USES (Uses)
(in DNA sequence detn. by dideoxy method)
RN 87092-22-6 HCAPLUS
CN Adenosine, 2'-deoxy-, 5'.fwdarw.P''-ester with thiotriphosphoric acid ((HO)2P(O)OP(O)(OH)OP(35S)(OH)2) (9CI) (CA INDEX NAME)

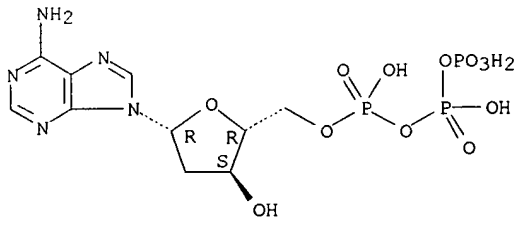
Absolute stereochemistry.



=> d bib abs hitstr l64 20

L64 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:402625 HCAPLUS
DN 105:2625
TI Properties of **hepatitis B** virus associated DNA polymerase
AU Oh, Sang Hwan; Park, Yeon Hee
CS Coll. Med., Yonsei Univ., Seoul, S. Korea
SO Yonsei Med. J. (1985), 26(2), 175-83
CODEN: YOMJA9; ISSN: 0513-5796
DT Journal
LA English
AB The nature of **hepatitis B** virus (HBV) particle-assocd. DNA polymerase (I) was studied in relation to various enzyme inhibitors, including antiviral agents. HBV I required high concns. of MgCl2 (>30 mM) and neutral pH for full activity. p-Chloromercuribenzoate was a strong inhibitor (85% inhibition at 1 mM), but N-ethylmaleimide had much less inhibitory effect (20% inhibition at 10 mM). Phosphonoformic acid showed the greatest inhibitory effect on HBV I (almost complete inhibition at 100 .mu.M) among phospho compds. tested. Adenine arabinoside triphosphate (ara-ATP) and cytosine arabinoside triphosphate (ara-CTP) were competitive inhibitors with respect to their resp. deoxyribonucleoside triphosphates (dATP and dCTP, resp.). Ara-CTP was a stronger inhibitor of HBV I compared to ara-ATP. The Ki values for ara-ATP and ara-CTP were 15.0 and 11.7 .mu.M, resp.
IT **1927-31-7**
RL: RCT (Reactant)
(reaction of, with DNA polymerase of **hepatitis B** virus, kinetics of)
RN 1927-31-7 HCAPLUS
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



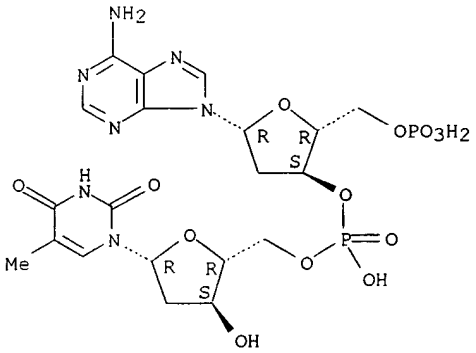
=> d bib abs hitstr l64 21

L64 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN 1979:553282 HCAPLUS
DN 91:153282
TI Problems with particle-associated DNA polymerase assays in the diagnosis of plasma-suspended viruses
AU Lorenz, Peter R.
CS Res. Lab., Behringwerke A.-G., Marburg, Fed. Rep. Ger.
SO Zentralbl. Bakteriol., Parasitenkd., Infektionskr. Hyg., Abt. 1: Orig., Reihe A (1979), 244(1), 25-38
CODEN: ZMMPAO; ISSN: 0300-9688
DT Journal
LA English
AB The in vitro reaction results of virus-assocd. DNA polymerases for the demonstration of plasma-suspended particles of avian leukemia virus (AMV) and of hepatitis type B virus (HBV) were compared. AMV particles could be identified by the transcription of the templates, poly mC(dG)12-18, poly rAT10, and poly d(AT) using standardized reaction mixts. With comparable test conditions, no DNA polymerase activity was found in human plasma contg. HBV. These findings and the results of a systematic study of factors influencing the polymn. assays are discussed.
IT **26966-61-0**
RL: BIOL (Biological study)
(as template in DNA polymerase detn.)
RN 26966-61-0 HCAPLUS
CN Thymidine, 2'-deoxy-5'-O-phosphonoadenylyl-(3'.fwdarw.5')-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2147-15-1
CMF C20 H27 N7 O13 P2
CDES 5:B-D-ERYTHRO,B-D-ERYTHRO

Absolute stereochemistry.

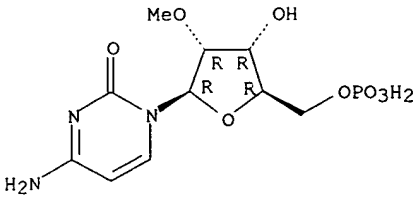


IT **71633-48-2**
RL: BIOL (Biological study)
(as template in reverse transcriptase detn.)
RN 71633-48-2 HCAPLUS
CN 5'-Guanylic acid, 2'-deoxy-, polymer with 2'-O-methyl-5'-cytidylic acid (9CI) (CA INDEX NAME)

CM 1

CRN 18422-43-0
CMF C10 H16 N3 O8 P
CDES 5:B-D-RIBO

Absolute stereochemistry.



CM 2

CRN 902-04-5
CMF C10 H14 N5 O7 P
CDES 5:B-D-ERYTHRO

Absolute stereochemistry.